

# IPD COMMODITY REPORTS

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JULY 2009

## CARBON STEEL PIPE

### MARKET UPDATE

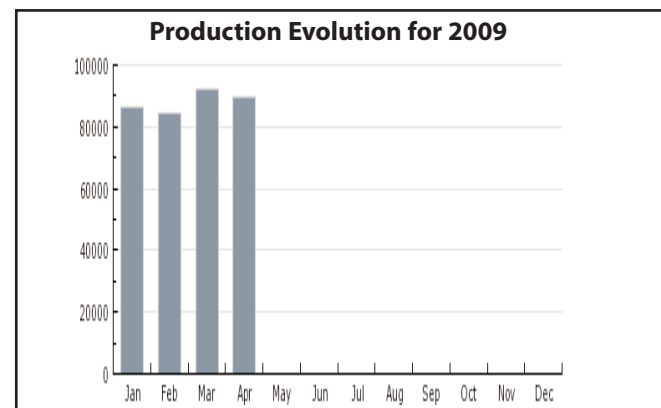
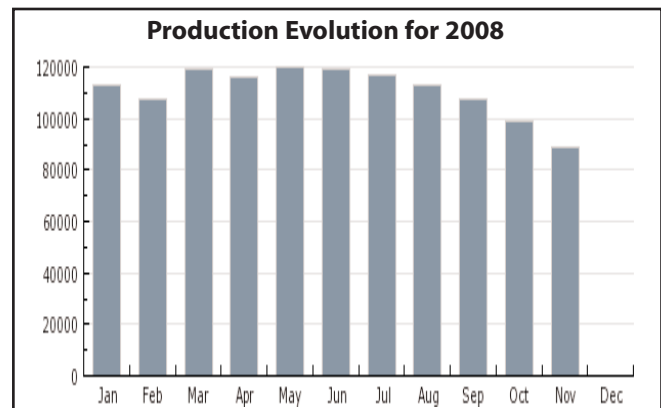
Steel production has dropped to historic levels and tubular supply has risen to historic levels. The entire supply chain has suddenly had to go from speeding to full stop and needs time to adjust. The question is how much time and when has the bottom arrived? Major points that are and will affect pricing and supply are summarized into the bullet points below. They are in no certain order.

1. Scrap and raw materials continue to stay at low price levels but seem to be bottoming. In the last few weeks we have actually seen a slight increase.
2. Iron ore – a price decrease of 33% has been agreed to by the Japanese but Chinese mills are looking for more. The Chinese were just dealt a blow when BHP Billiton and Rio Tinto agreed to merge their Australian iron ore operations.
3. The dollar is falling in value making imports more expensive which should help stabilize market pricing. With the amount of money the administration is printing, the dollar looks to continue to weaken.
4. China recently has started tax rebates again on steel products. Sheet or Hot Roll coil was one of the first.
5. Inventories still remain high in the market. Oil Country Tubular Goods (OCTG) are said to have 15 to 17 months on the ground.
6. The USA rig count continues to fall with the current level being in the mid 800's down from 1900 only 1 year ago.
7. The domestic steel industry has filed a dumping suit on China for OCTG (oil country tubular goods). This is the 4th suit on pipe. The other 3 were all successful. There are likely more suits to come for seamless pipe in both carbon and stainless.
8. USA Steel mills are operating at 42% of capacity vs 82% to 95% the previous 5 years. The USA produces on average approx. 100 MMT (million metric tons) per year and this year looks to be less than half. Pipe mills are operating between 10% to 40% of capacity - those that are still running.
9. Projects have been put on hold, scrapped due to the credit crunch, waiting for lower prices or just paralysis. Although a few of those are being resurrected with the recent increase in the price of oil, some experts are predicting an inevitable increase in the price of natural gas, which would increase natural gas drilling and related infrastructure projects. This seems unlikely for 2009.
10. Steel demand is weak and to top it off, auto's not only plunged in demand but bankruptcy filings that have hit the steel companies hard.

Selected GM creditors		
Company	Rank	Amount of claim
Delphi Corp.	7	\$110,876,324
Lear Corp.	9	44,813,396
Renco Group Inc.	10	37,332,506
Magna International Inc.	15	26,745,489
American Axle & Mfg. Holdings Inc.	16	26,735,957
Tenneco Inc.	22	14,637,427
Visteon Corp.	30	9,841,774
U.S. Steel Corp.	31	9,587,431
ArcelorMittal SA	32	9,549,212
AK Steel Holding Corp.	33	9,116,371
OAO Severstal	40	6,687,993
Sun Capital Partners Inc.	45	4,747,353

Source: General Motors Corp.

The below table illustrates the decline in world steel production since the peak in June 2008. Note that the scale had to be changed for 2009.



(Source: World Steel Association)

Continued on page 2

### ROUTE TO

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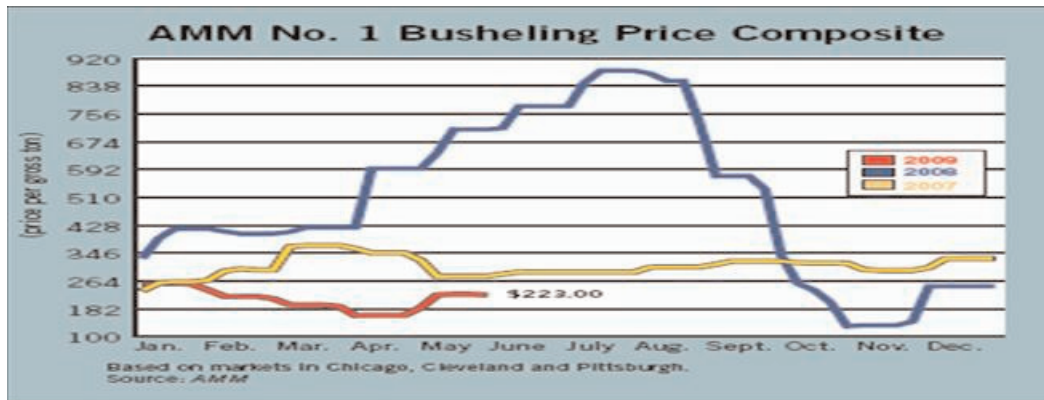
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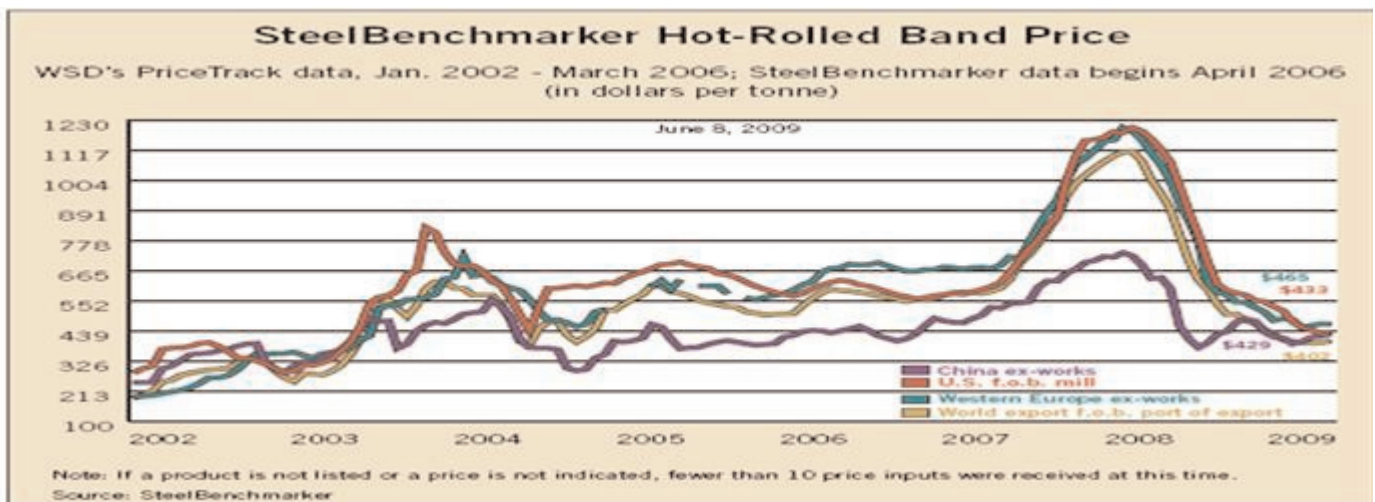
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**Raw Materials**

The scrap price has stayed low mainly due to a decrease in USA steel production which requires scrap. The export market for USA scrap is up nearly 10% over last year but this can be due to opportunities existing in the export side this year that did not exist last year when domestic consumption was very high.



The price of Hot Roll Coil appears to be reaching bottom. Note that the world supply is all about the same price now.



**Mergers & Acquisitions**

BHP Billiton and Rio Tinto have agreed to merge their Australian mining activities. The Chinese are looking to take measures to protect the Chinese domestic mills.

**China Update**

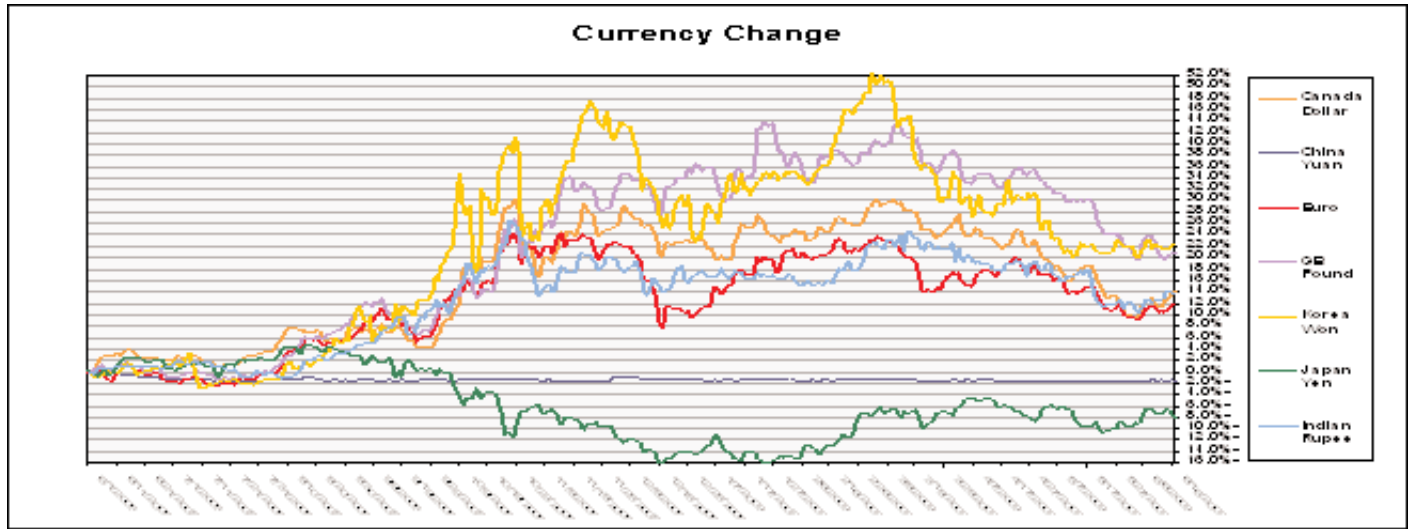
As the charts below show, the world has cut back dramatically on steel production while China seems to have made some adjustments. In June, China implemented a 9% export tax rebate on hot roll coil to get the export market moving.



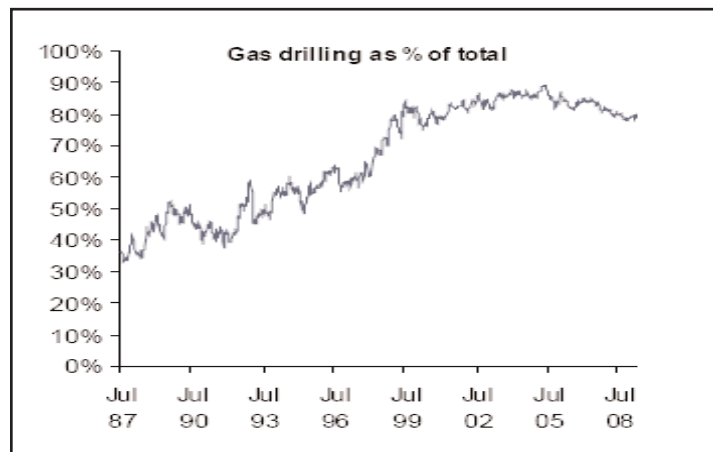
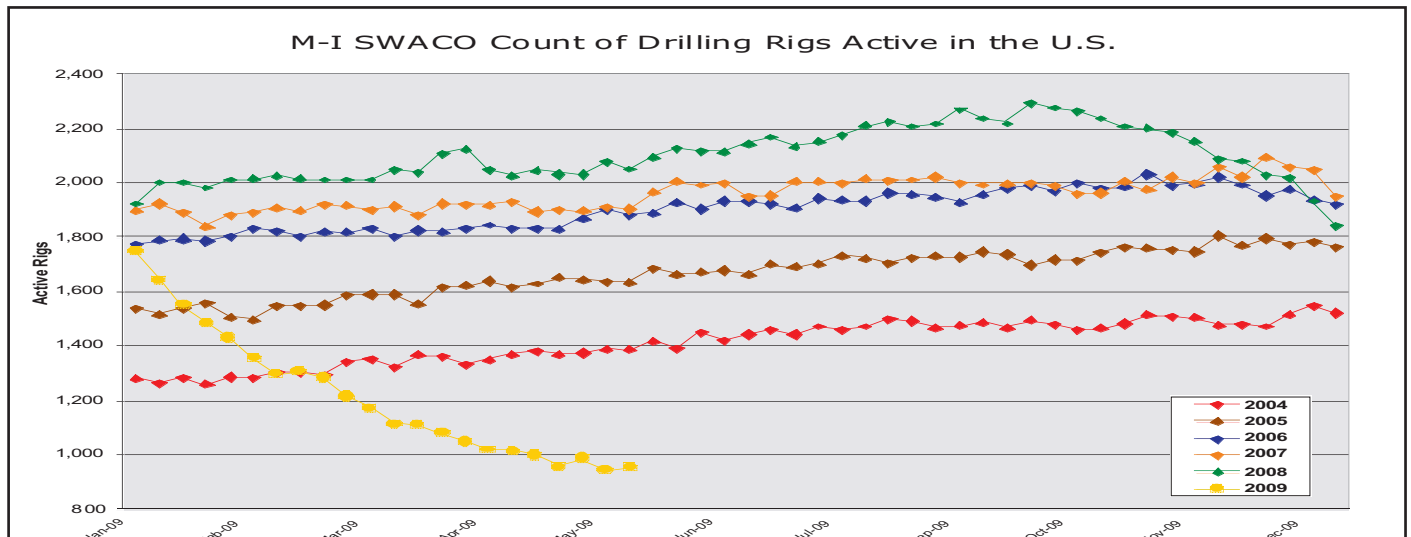
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**Currency Impact**

The dollar continues to be weak to currencies except for the yen.



The rig count continues to fall. The week of June 20, the rig count actually went up for the 1st time. Maybe we have seen bottom or was it just a dead cat bounce? The oil price has risen but the gas price has not and as you can see below, gas is what drives the drilling activity and therefore the tubular pipe mills in the USA.



Source: Baker Hughes

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## CARBON STEEL

**Seamless Pipe** – Seamless pipe production in the USA is virtually non-existent. Due to the rapid fall in demand of OCTG and line pipe and the inventory supply in the market, mills had little option but to shut down or keep on a skeleton staff. From the figures we have, it is estimated that seamless pipe production is at 10% or less of capacity. A new dumping suit was filed on OCTG and the initial vote was 6-0 to continue the investigation. This suit involves both CVD (countervailing duties) and AD (antidumping duties) duty allegations. There is also a surge provision date of April 8th (the date of the filing), whereby any import that cleared customs on or after that date could be subject to duties. Line pipe was not filed yet but is expected to as more information is collected.

Key dates on the OCTG suit are:

Filed – April 8th

Key injury determination – May 25th (vote was 6-0 in favor of the petitioners)

Preliminary determination of dumping rates – Sept 8th for CVD and Nov 4th for AD.

Final determination of dumping rates – Nov 19th for CVD and Jan 18th for AD

Final determination – May 3rd 2010.

There is concern about oversupply that most likely will be created by new mills that have been announced and newly reduced demand.

<u>Name</u>	<u>Location</u>	<u>Capacity MT</u>	<u>Start-up</u>
V&M do Brazil	Brazil	600,000	2010
JESCO	Saudi Arabia	400,000	2009
ArcelorMittal	Saudi Arabia	600,000	2010/2011
Tenaris	Mexico	450,000	2011
TPCO	Texas USA	550,000	2011
Many Others	China	4,500,000	Various

This is a total of 7.1 MMT. The mills above will produce mainly OCTG but also line pipe. USA consumption of OCTG and line pipe appears to be approx. 3 to 3.5 MMT market for now. If the USA dumping suits are successful and with the EU just recently announcing dumping duties on China, one has to wonder where the new production would go.

## WELDED ERW PIPE

**Line Pipe** - The Line Pipe dumping suit against Chinese manufacturers was finalized. The following margins are being applied.

### Line pipe under 16"

#### CVD

The Huludao companies	31.29%
Liaoning Northern	40.05%
All others	35.67%

#### AD

The Huludao Pipe Ind.	73.87%
Jiangsu Yulong	73.87%
Pangang Group	73.87%
Benxi or Lianzhong	74.68%
Benxi or Lianzhong	81.52% (exporter Shanghai Metals & Minerals)
Tianjin Lifegyanda	73.87%
All others	101.10%

Importing into the USA, one will need to add both duties together to get the rate to apply to new purchases.

The new OCTG suit mentioned above also covers welded OCTG. Welded mills seem to be operating below 50% of capacity. There is more diversified work (structural, standard pipe, etc.) to keep welded pipe mills working but many are at reduced capacity or are idled. The flat roll price (see steel benchmarker chart above) seems to have hit bottom so welded prices should stabilize and could even start back up. Two steel companies announced price increases on flat roll products in June.

**Standard Pipe** – The line pipe suit mentioned above will impact this product as the line pipe from China was being used for standard pipe. As you recall from the last market conditions, the Chinese were hit dumping margins on standard pipe but we then saw an increase in tonnage coming from China for line pipe.

**CW Pipe** – The key domestic manufacturer, Wheatland, has reduced prices and lead times have become very short. We are seeing this pricing now stabilize with the recent steel price announcements and looking for an opportunity to go back up.

**Welded DSAW/Spiral Pipe** – The problem is shifting from lack of supply the last couple of years to an oversupply situation. We could see global overcapacity of over 30% depending on future demand patterns. Significant capacity has been added in the USA, Middle East, China, & Russia. This new capacity can take over demand that was seen from the traditional sources in Europe. ArcelorMittal has announced a \$40/ton price increase on plate effective in July. Plate is currently selling for around \$580 per ton at the mill.

# CARBON STEEL/IRON FITTINGS & FLANGES

There has been a dramatic slowdown in weld fitting and flange demand in the first half of 2009. Commercial construction as well as industrial projects have fallen dramatically with some markets declining 25% and higher. Surprisingly, domestic prices have not followed the drop in demand after a small decline in January. Seamless pipe prices have remained relatively firm which has provided price support for the fittings, and increased demand in China and India have helped sustain the pricing on flanges.

Imported fittings and flange prices have seen more volatility than domestic product. Slowing down the flow from overseas suppliers and the significant downturn in the market has created this scenario. Master distributors trying to adjust their inventories could lead to additional pricing pressure.

Inventory levels for both domestic and imported product are very good. The lack of demand in the U.S. has created a surplus at both the distribution and manufacturing levels. Until inventories adjust to the reduced demand in the market availability should be good.

## Carbon Forged Steel Fittings & Unions

Forged steel fittings demand has fallen from its 4th quarter 2008 highs by a range of 35 to 45 percent. The two main reasons for this dramatic correction is the lack of business and inventory reductions. There are now signs that we have hit bottom and are hopefully leveling off.

Lead times and fill rates remain strong in the mid 90 percentile range for A&B items. Commodity standard items and special items delivery range from 2 to 4 weeks. This pattern has existed for quite some time and reinforces the distributors' position not to invest lots of dollars in inventory. Smaller purchase orders placed more often appear to be the trend. This gives Domestic manufacturers a definite advantage with raw material readily available and capacity being a non issue.

Prices are under pressure primarily due to the extreme competitiveness of this product line in a very soft market. In addition, the down-

ward spiral of raw material costs may provide the potential for future lower costs. With less to go around, it is advisable to keep a close watch on this commodity.

Future forecasting is like throwing darts at the wall. We do know there is a bottom and things will get better. Presently funding for projects is still a big issue. We also know that the new administration favors renewable energy and is unkind to domestic fossil fuel development. The good news is that for at least now, renewable energy will take years before it begins to have an impact on the PVF industry. It is a consensus that there will be a very gradual come back but we will not return anytime soon to the high demand levels of 2008.

## Carbon Welded & Seamless Pipe Nipples

Welded pipe nipples demand continues to remain weak as we wait for the start of the housing recovery followed by commercial infrastructure projects and businesses returning to normal operating levels. Service levels remain high from pipe nipple manufacturers and master distributors. This year there has been few ERW pipe purchases which bring up the concern of how quickly the mills can react to new orders.

Welded pipe nipples prices have fallen significantly due to the dramatic drop of ERW pipe prices. The many welded pipe nipples manufacturers and master distributors are holding more than adequate inventory. Options are mixed as to whether we reached the bottom for demand and price deflation.

Seamless pipe prices have now followed the same course as ERW pipe prices. To-date the seamless pipe nipples and related products have not seen double digit decreases. This commodity continues with an approved manufactures list advantage over welded nipples. Even so, it is a known fact that pipe nipples like other pvf commodities prices, in the long term, primarily follow the cost of the material. The chain from manufacturing through distribution of seamless pipe nipples needs to continue to be cautious of inventory levels.

# PLASTICS

## HDPE Material

March until mid June prices have been flat. In the past two weeks, we have seen manufacturers raise prices approximately 5%. Deliveries are still 2 weeks on 20" and down and 3-4 weeks on 24" and larger. Volume has picked up slightly, however the increases are not due to demand in North America. We are being told that there is increased demand for North American resin in Europe thus driving our raw material prices for pipe up and in turn driving pipe prices higher.

The demand for North American resin in Europe is increasing due to oil prices. In North America, polyethylene resin is made from natural gas while in Europe it's made from oil. As oil prices increase but natural gas prices stay stable, North American resin becomes cheaper to produce than European resin and demand for North American resin from Europe increases. And of course, currency fluctuations (weaker U.S. Dollar) accelerates this process. So while sluggish natural gas prices suggest prices should be dropping, increased demand is moving pricing in the opposite direction.

## PVC Material

PVC is a dog fight right now. There is a surplus of supply and the vendors seem to be fighting tooth and nail to get what volume they can. That being said, the Canadian market is overpriced versus the U.S. so we have a lot of room to move downwards. But everything out of the U.S. is similar and the pressure of pricing is downwards. Long term, oil is what drives PVC so resin costs will move up.

In summary, inventoried material is moving down as distribution clears out excess, but mill prices will start to move up with raw material costs. And yes, those are contradictory positions...makes it fun!

# VALVES

The general market conditions have slowed significantly since last year and most markets are well off of last year's volume levels. The Power industry still appears relatively strong with a healthy amount of new build and retrofit projects currently planned or under construction both in the U.S. and globally, but even this market is showing signs of slowdown for 2010.

Since our last market update, copper and nickel raw material prices have continued their roller coaster ride that started with a big uphill climb about five years ago. This time the ride is climbing back up the hill after a brief, but hard drop. Admittedly, copper and nickel are both still below the all time highs that were reached in the middle of 2008. In mid 2008 these raw materials had risen in cost from their previous historical averages by a factor of approximately five times in a matter of five years. Valve manufacturers scrambled to react to these unprecedented market price increases and on average raised valves prices approximately 30% - 40% over that entire five year period. This represents less than 10% of the true raw material increase actually passed on to the market place.

Remember also that during this five year run up in raw material costs, energy, freight, foreign exchange, healthcare and insurance costs have all climbed at unprecedented rates at the same time. Not to mention the general inflation factors for salaries and wages that have steadily climbed each year. Clearly, valve manufacturers did not pass on the full impact of these increases to their business into the market place at the time when raw material prices hit their peak. Therefore, as the raw material prices eased, it made it possible for the manufacturers to withhold additional catch up price increases.

As we entered into 2009, another significant business dynamic had entered the scene - an extremely weak market demand, particularly in the commercial construction sector. Orders started to slow for many manufacturers late in 2008 and the slide has continued for the first 6 months of 2009. As volumes started to decline the reaction for both manufacturers and distributors has been to reduce inventory purchases and at the same time reduce the absolute value of the inventory on hand. It is generally more difficult to reduce inventories when volume is dropping. The only way to accomplish this goal is to reduce purchase orders below the level of the current market demand. As distribution has executed this necessary business survival strategy to preserve cash; it has had a significant impact on the manufacturer. The manufacturers now not only have to deal with the weakened general market demand but also with the reduction of absolute inventory level of their distribution partners.

Consider that some valve manufacturers have raw material in their inventory at every level of the process: from the pure raw materials on the shelf to the castings poured; machined component parts; subassemblies; and lastly finished assembled valves. The sum of all of these raw materials in inventory could equate to as much as six months or more of on-hand materials before taking into account any open purchase order commitments, which are likely at firm prices. When the impact of the shrinking market demand is added to the reduction of distribution's absolute inventories, the manufacturers' on-hand raw materials inventory may now be as much as nine months or more. In his effort to control inventories, the manufacturer must drastically reduce purchase order commitments for raw materials just as the distributor has done. It is possible that the manufacturer may not need any new raw materials for several months. Also consider the timing of all of these actions. As late as September of 2008 copper was still at 85% of its all-time high market

price. This means that most or all six months of the manufacturers' on-hand raw material inventory was purchased at the highest prices in the history of the industry.

The good news is that service levels have been at an all-time high for the past several months because inventory turns have reached all-time lows. This is happening despite distributors and manufacturers doing anything and everything they can think of to sell off inventories in the face of the weak market demand. This weak market demand and inventory sell off period has happened just as the manufacturers were about to take advantage of some of the lowest raw material prices in the last five years. Instead, most manufacturers have reacted by reducing their purchase order commitments as quickly as possible, right when the market was at its lowest point in five years. Now as the inventory has begun to level out again and purchases start to normalize, albeit at lower levels, copper makes another run up the roller coaster.

Manufacturers have yet to announce or discuss price increases in the midst of this very weak market demand. The industry has actually seen some valve project pricing at the lowest levels in many years. This is in large part due to the considerable pressure in the marketplace for distributors and manufacturers to capture as much of the business that remains during this period of weak general demand. Over the years valve manufacturers have passed on the lowest price increases in the industry to their customers. As the raw material prices increase again and the other inflationary factors continue to exist there will be considerable pressure on valve manufacturers to capture some small portion of those real market cost increases. To date these increases have yet to be passed on.

Everything happens in cycles, and as the market flattens out and begins to improve there will be considerable pressure on manufacturers and distribution to respond to the market demands just as inventories are reaching their lowest point in many years. This level of service will be further challenged by California's new "lead free" law AB 1953. This new law will not affect every valve manufacturer. However, for those supplying bronze valves into potable water service it will have a significant effect.

The law commences on January 1, 2010 and requires a significant reduction in the lead content of the products from the current levels that range between 3% to as much as 6%; down to a maximum lead content of only 0.25%. This will be an enormous endeavor for bronze valve manufacturers; the California initiative requires that any product used in potable water service be manufactured from a new and different "lead free" bronze alloy product. This will require a large percentage of the existing product lines to be duplicated to account for these new bronze "lead free" alloy products. At the present time only a few states have adopted this law outside of California, which means that the volumes will be relatively low. The required raw materials dictated by the Low lead percentages are significantly more expensive than current bronze alloys even when purchased in similar quantities. The combination of duplicate inventories and very low unit volumes (relative to the existing bronze business) will make these new lead-free products very costly.

As we have written in previous Valve Reports, the customers' knowledge of the valve manufacturer will enable a buying decision to be made that results in the correct product supplied at the correct price. What seems to be too good to be true, probably is.

# STAINLESS STEEL PIPE, FITTINGS & FLANGES

In a word, the stainless steel PVF market is conflicted - which is nothing new for a business characterized by its tendency towards periods of feast or famine. The market has been gripped by fear and panic for most of the first half, as difficult conditions have been further exasperated by widespread, ultra-aggressive attempts to unload excess inventories bought or produced at highly inflated prices. Distributors have taken careful notice, apparently cutting inventories even further than the extent that the weak demand has dictated. However, as of this writing, spot LME nickel prices are at the highest level since October 1st of last year and nearly 70% higher than they were on March 31st of this year. Current prices are in complete defiance to the fundamentals as LME stockpiles remain near 14-year highs and consumption, in the wake of last year's economic tsunami, remains lackluster, at best. So, what's driving this sudden price resurgence? And, can it be sustained?

Guarded optimism is beginning to replace outright pessimism across broad markets continuing to adjust to a mixed array of signals that financial leaders hope point toward an economic recovery that will take flight during the second half. But this improved sentiment and the recent rallies its sparked across base metals, oil and a host of other commodities can potentially be undone in a hurry, particularly since the World Bank's June 22nd report predicts that the global recession will be more severe than what it had forecasted in March. "While the global economy is projected to begin expanding once again in the second half of 2009, the recovery is expected to be much more subdued than might normally be the case." After forecasting a 1.7% decline in the 2009 global economy during March, this report suggests that the decline will be 2.9% and downgraded its U.S. forecast from negative 2.4% to 3.0%, Japan's from 5.3% to 6.8% and Europe's from 2.7% to 4.5%. The World Bank also lowered their 2010 global growth projection from 2.3% to 2.0%. Two days later, the U.S. Federal Reserve left interest rates unchanged and declared that "economic activity is likely to remain weak for a time" and while the Committee acknowledged that prices of energy and other commodities have jumped lately, it "expects that inflation will be subdued for some time."

Skeptics would assert that stainless steel PVF consumers remain skittish and underlying demand levels have not improved to a point that will stimulate distributors to begin buying for inventory instead of day-to-day requirements. They'll view higher stainless prices as completely driven by the price increases of other commodities and speculation and expect major corrections to occur with the light demand that the summer months bring.

The main road for demand and supply indicators of stainless steel and its major ingredients runs through the world's largest consumer of base metals. China's State Reserve Bureau, the country's secretive commodity management arm, initiated a metals stockpiling program during the second quarter that has generated a lot of questions. Was the main impetus to diversify away from some of their US\$1.9 Trillion holdings in U.S. treasuries into price depressed commodities that can be easily warehoused and engender significantly higher returns than the greenback? Or, was Beijing simply taking advantage of the low prices and making sure that they will not be caught off guard by the next period when demand outpaces supply? Anecdotal information suggests that the SRB is selling or even loaning materials into the domestic market in an attempt to keep prices from rising too high through speculation. Regardless of the actual intent, the extent to which the Chinese government invests in metals over and above their actual demand patterns will have a major impact on global prices. A more intelligible threat to the sustenance of higher prices is

nickel pig iron. Current prices are now in the range for producers of the lower quality substitute to begin profitably ramping up production again and throw a monkey wrench into the already fragile supply demand equation.

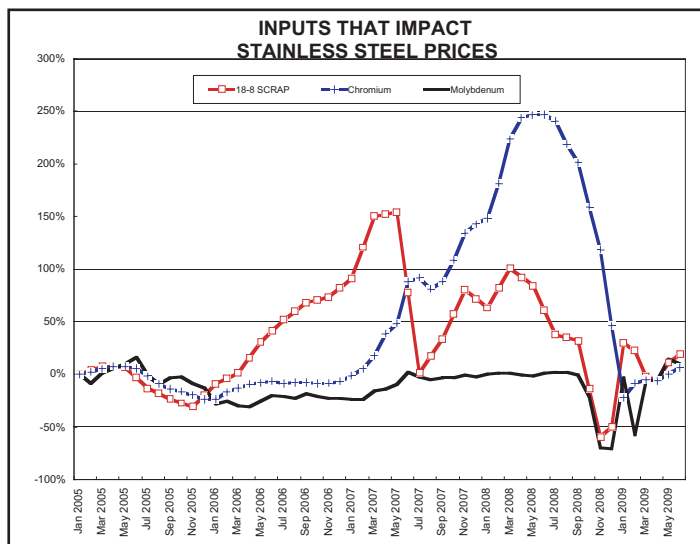
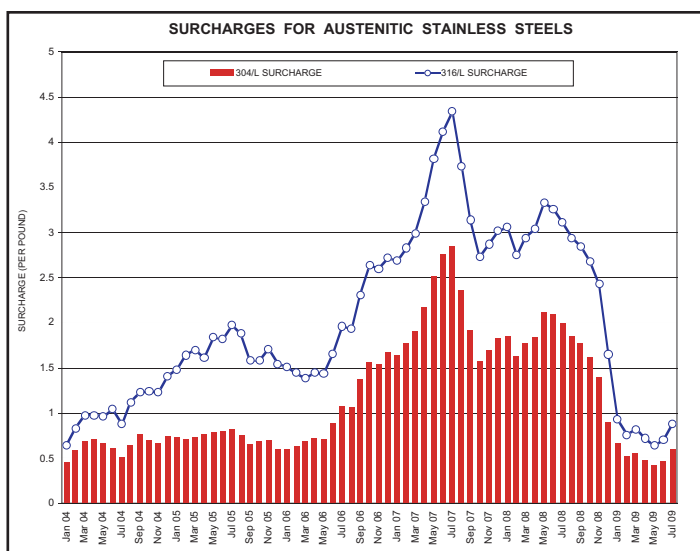
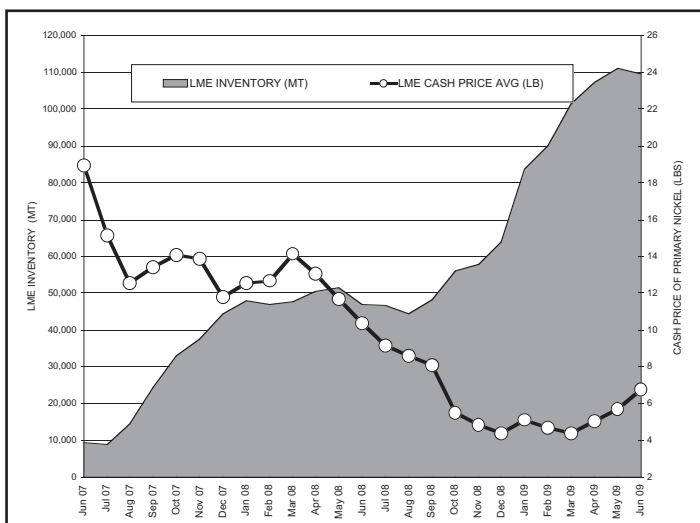
Ultra-aggressive cutbacks by miners provide a naturally strong backdrop of support to price increases of nickel, chromium and molybdenum. 304 scrap prices have nearly doubled since the beginning of this year and availability is exceptionally tight given the near collapse in stainless steel production. Molybdenum and chromium prices are beginning to strengthen, signaling that the cheap supply of those crucial stainless inputs is gone. As major stainless mills begin increasing production, the very weak scrap market will force them to purchase primary metal as there is always a lag of three to six months between increased stainless steel production and ample availability of scrap. This can potentially provide a big shot in the arm to fundamentals and continue to spawn sharp increases to surcharges - we project August surcharges will be about 67% higher than May's in both alloys - and total transaction prices of finished products. Accordingly, the pace by which stainless production levels increase will determine price levels for the immediate future for nickel and stainless' other key inputs. The speed and capability of the various supply responses will determine the degree and duration of the increases and whether or not another price bubble will possibly be formed. While admitting that end use demand activity has not increased, major stainless producer Outokumpu, announced that orders for fourth quarter delivery has improved to the point that they will boost production (from 50-60% of capacity to 60-70%) during September. The fact that first quarter global output was the lowest quarterly amount registered since 2000 makes it clear that a restocking phase is imminent. This should prove to be very supportive to future nickel and stainless prices, especially if it coincides with the dynamics of a recovering broad-based global economy.

Other key factors that will influence near term demand and price levels of nickel and stainless steel PVF include: the U.S. dollar - a weaker dollar makes LME metals (and all commodities priced in dollars) cheaper for holders of other currencies; oil prices - as production increases, demand for steels will ramp up; equities - provide direction to metals and many commodities, particularly during uncertain times; China's June increase of V.A.T. rebates - Tax breaks are being extended to provide respite for various industries affected by the economic slowdown. Certain producers may opt to resist passing cost increases onto customers in hopes of increasing their export order volumes. Impact of global stimulus spending - China's spending package already appears to be having a positive effect on their stainless steel demand levels.

It stands to reason that welded pipe is the most unstable stainless PVF product, since it contains the largest ratio of material relative to its total cost. After enduring several months of continuously collapsing total transaction values, domestic welded pipe producers are implementing their second mill base increase in 60 days (May sheet was 10%, July sheet is 6% to 9%) on the back of the sharp increases to surcharges during July and August. It's ironic that May was both 2008's peak (304/L \$2.12/lb., 316/L \$3.33/lb.) and 2009's bottom (304/L \$0.42/lb., 316/L \$.64) for surcharges. Significant price increases on pipe - which have the potential to become very substantial depending on future surcharges - are taking immediate effect. Other stainless steel products generally take their directional price cues from stainless steel pipe.

*Continued on page 8*

Provided that a reasonable level of discipline is exercised on the supply side, it appears likely that a bottom for stainless prices has been reached. Inventories of finished goods continue to decline, which should bode well for future demand patterns of nickel and eat into LME inventories estimated to be around ten weeks of consumption. While there seems to be reason for optimism and to proceed with making significant investments in inventory again, market participants would be wise to heed the words of Ian Hunter: *Once Bitten Twice Shy*.



## GROOVED/MALLEABLE IRON FITTINGS

### Grooved Fittings and Valves

The project activity in the health care, institutional and the power markets has remained strong throughout the country and will continue through the foreseeable future. There is a great deal of school work that will carry through the summer months and beyond with a substantial backlog in most areas. Plans for new potential projects continue to build with design engineers and construction in most markets and it appears to be tracking in a positive and upward direction. Based on historical trends, there is the likelihood of a price increase in the fall of this year.

The Stimulus Package launched by the Obama administration has dumped a considerable amount of local, state and federal funding for a variety of projects in the construction markets with a high priority for start and completion. While a large portion of the funding is certainly related to highways and infrastructure, there are also numerous opportunities in PVF projects that were spurred as well. The areas of the country that received the majority of the funding are the Northeast, Southeast, Southwest and the Pacific Northwest.

### Domestic Malleable Fittings

The domestic foundries report a continued slide in production units in the range of 22-30% with little movement in demand and large inventories to work down. The significant decline in the Oil and Gas market has had a dramatic impact on the demand of this product. Both domestic foundries have reported layoffs as a result of the slow times. The cost of raw materials may have bottomed out at this point and market pricing has remained fairly stable. There has been no report of a potential price increase at this time.

### Import Malleable Fittings

Overall, China is seeing a general increase in pricing from their manufacturing sector as a result of their own 4 -Trillion-Yuan Stimulus Package, where the activity is mainly in real estate and infrastructure projects. There is still caution and less optimism from insiders in the industry warning them not to over produce and plan production based on market conditions. Imports to the U.S. have slowed considerably due to the continuing decrease in demand and the abundance of inventory on the ground here in the states. Pricing remains very flat and will likely remain the same for the remainder of the year.

# COPPER TUBE & FITTINGS

Copper has surged over 60 percent this year from the December lows for several major reasons:

- 1) Expectation of the U.S. and China stimulus funding of infrastructure projects
- 2) China and South Korea adding to strategic metal reserves
- 3) Speculation that the worst of the global recession was over and that China's use of the metal would rise. The Asian country is the world's biggest copper user, followed by the U.S.

A robust rise in prices from around \$3,000/mt at the start of the year looks to be the support level going forward. China has been a key driver behind this year's price surge.

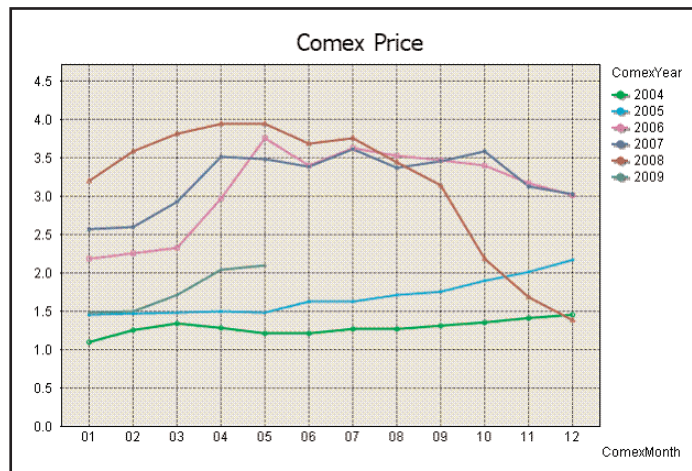
Other factors affecting the past six months of rising prices have been: the import opportunity, stemming from higher prices in Shanghai compared with London, (created a favorable arbitrage between the London Metal Exchange (LME) and Shanghai Exchange that made it cheaper to import copper cathode into China, and the need by Asian buyers to convert U.S. dollars into hard assets (a phenomenon we are seeing across the entire hard asset class). In addition, due to the lack of credit, low prices and slowing manufacturing activity, scrap supplies have declined. Finally, the speculative market short covering we have seen in the previous 12 to 18 months has picked up as copper prices have stabilized.

Most recently announced, poor industrial production data out of the U.S. and reduced demand by China have caused the rally in copper in the past month to be a little overdone. Copper production outpaced demand by 133,000 tons in the first four months of 2009, according to a statement today from the World Bureau of Metal Statistics. Inventories at the LME have fallen 48 percent from the year's high on Feb. 25. Copper producers and marketers all down the supply chain are keeping some supply out of the market due to low prices or a complete lack of buyers. Copper is following the general investor sentiment at this point.

Overall, North American demand as reported by the Copper Development Association ([www.copper.org](http://www.copper.org)) is that total industry volume (expressed as year over year) has declined approximately 15-18%, depending on market region. The decline in residential and industrial construction is a primary issue with the resulting decline in overall waterworks business as a secondary effect. The current growth opportunities continue to be in the following industry segments where funding is available:

- Governmental Commercial Construction – schools, government facilities, etc.
- Private commercial construction
- Hospital / healthcare
- Small and mid level OEM manufacturing

Despite the slowing national and global economies, the declining value of the U.S. dollar against other international currencies has had the greatest impact on the cost of copper. All commodities are cost-based in U.S. dollars. As a general rule of thumb for copper, as the U.S. dollar strengthens and copper stockpiles expand, Comex pricing tends to fall. Copper prices have been moving opposite of the value of the dollar throughout 2009.



Traditionally, the price of copper peaks during the summer months and then declines in the 3rd quarter, but one of the stronger possibilities for the remainder of 2009 is that the equity and real estate markets will continue to underperform for the risk taken and thus funds will flee to commodity assets such as copper. This scenario is also possible should the U.S. dollar continue to weaken where international traders invest in commodities as a hedge against inflation.

For the balance of 2009, the red metal looks to have stabilized in this current trading range of between \$2.20 and \$2.45 per pound, but expect continued volatility with the assumption that there will be overall price erosion with an occasional price spike. Factors to watch: inventories at the London Metals Exchange monitored warehouses continue to rise, although they are nowhere near their peak levels. Global usage of copper continues to decrease (but keep an eye on Chinese demand). The residential housing market is trying to hit bottom and the full impact of international credit crisis is yet to be determined. With this much uncertainty surrounding the market, it would be prudent to take a cautious approach for the remainder of 2009.