



State of the Economy / Carbon Steel

This article was provided by Stephen G. Letko of Weldbend Corporation. The following is a transcript of a presentation for the PVF Roundtable Panel Discussion at the ASA Convention on October 3, 2008.

The topic to be addressed concerns the Bi-polar state of the economy for our business sector the carbon steel welding fittings and flanges segment through the remainder of the year and 2009. The economy that our industry addresses is composed of three (3) segments.

1. The residential and light commercial construction market.
2. The mechanical contractors market for larger commercial and industrial projects.
3. The heavy industrial markets: i.e., power (conventional/nuclear), refinery, pipeline construction (transmission/distribution) and petro-chemical.

We are all astutely and painfully aware of the crisis in the housing market. The softness in this market affects the demand for smaller commodity fittings and flanges which has been offset by the activities in the other two segments of the economy that we address. The Mechanical Contractors Markets have been strong throughout North America and should remain strong through the remainder of 2008. A softening in 2009 is expected due to the crisis in the financial markets and the soaring costs of raw material, primarily steel products. This softening will be felt in pockets of the country with some slowing and others remaining quite active. The Virginia / Maryland market as an example will remain strong as a result of government spending on the Base Relocation and Closure Initiative (\$10 Billion in today's dollars). Recent moves seen last week and this week by the Federal Government are designed to provide the liquidity allowing projects currently under construction to proceed and to provide the liquidity for funding of those planned for the near future and into 2009. Engineering New Record's Report on Total Construction (excluding refinery and pipeline construction figures) indicates that total private construction was down from 2007 levels primarily due to a slowdown in the value of new residential construction which dropped 27% in total value. The downturn in housing masked the strong 18.3% increase for private non-residential building construction and a 7% increase in public construction.

The strongest growth markets have been a 44% increase in hotel and motel work, a 49% increase in power work and a 34% increase in industrial buildings (manufacturing). Remember, not included in this report are the figures for refinery and pipeline construction. In your markets you may, or have seen, several projects being either postponed or cancelled due the chaos in the financial markets. These events are offset by increases in other regions and by the demand being created in the third segment of the economy our industry addresses, heavy industrial construction.

Industrial Info Resources reported on August 11, 2008 that there are 834 Petroleum Refining projects totaling more than \$104 Billion that are started or scheduled to start in the near future (some of which are currently starting piping system construction). The Motiva Project in Port Arthur, TX is a \$3.5 Billion dollar expansion adding 600,000 bpd production is scheduled for completion by the end of 2010. A \$3.2 Billion refinery project by Marathon in Garyville, LA and a \$1.9 Billion expansion in Detroit, MI. are just commencing. BP in Whiting, IN has a \$3.5 Billion expansion underway and a new \$10 Billion Hyperion refinery in South Dakota has been announced that will be the first grass roots refinery build since 1976. These are just a few examples of the massive construction projects underway that are impacting our industry.

In addition to these massive projects the pipeline industry is engaged in the most aggressive expansion and retro-fit initiative in history. This year's North American pipeline construction figures show a dramatic rise from just a year ago, increasing from 14,296 miles to 28,314 miles. No matter where you look, natural gas dominates future activity. There is 10,704 miles of future gas projects in the U.S. alone. Of these, 7,360 miles represent new planned gas infrastructure; 939 miles are to accommodate future LNG projects; 2,137 miles are planned expansions; and 268 miles represent replacement lines.

Not included in these figures is the Alaska Gas Pipeline just approved by the Alaska House and Senate and signed by Governor Palin. Investment required to meet the future U.S. demand for energy is estimated in today's dollars at \$1.2 trillion through the year 2025 in the Exploration & Production sector; an additional \$81 billion in pipeline/storage/LNG regas facilities; and \$122 billion in distribution. These are projects that are directly related to the Continental USA. An article appearing in the August, 2008 Edition of the Pipeline & Gas Journal by Barry Worthington, Executive Director of the U.S. Energy Association states that the world energy industry will require \$22 Trillion in the next 2 decades.

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STAINLESS STEEL PIPE

Pricing ↓ Manufacturers predict price decreases in the range of 5% - 10% due to falling surcharges, weaker demand, very low import prices flooding the U.S. market as business drops in other parts of the world, and raw material costs.

Lead Times - Forecast lead times are 4—8 weeks with fill rates of 50% - 70% for commodity stainless pipe. Non-stock specials are forecast for 8—20 week deliveries. Backlogs are down worldwide. Most service centers are not buying, and are aggressively de-stocking in the light of dropping prices according to manufacturers. Import lead times appear to have shortened considerably after coming back from the August holiday period.

Comments — One manufacturer states that pricing will not improve significantly until the larger global financial issues begin to be straightened out. Another manufacturer reports that the stainless market will struggle for the next 4 or 5 months. Energy related projects will rebound in the second quarter of 2009 making the 2009 year similar in overall volume to 2008. The weak economy and the government bail out of our banking system is the most troubling. Prices in the U.S. market are being dropped to ridiculous levels in some cases in an attempt to “buy” a backlog for the first quarter of 2009. One manufacturer state that the recent hurricanes have slowed business activity significantly at a time when orders were being placed at a comfortable pace prior to the storm's impact...now things seem very slow to come back.

STAINLESS STEEL WELD FITTINGS, 150 & HI-PRESSURE FITTINGS

Pricing ↓ Manufacturers of stainless fittings indicate pricing to be down 3% to 5% due to demand and competition. One manufacturer indicates there will be no change in pressure fittings.

Lead Times — Fill rates for commodity fittings are running 60% - 70%. Lead times for commodity material not shipping from stock is 4 - 8 weeks. Non-stock specialty items depending on material grades can go out as far as 8—16 weeks. Large OD fittings are forecast for 16—20 weeks.

Comments — Nickel pricing has dropped almost 30% since September 1, 2008. However, alloying ingredients like iron, molybdenum and chromium remain strong which have offset the net cost decrease for stainless steel PVF prices. A major manufacturer of stainless fittings

comments that activity is still healthy; however, as compared to the 2nd and 3rd quarter of 2008, it may be down approximately 10%. We are hoping that after elections and year end, the activity is expected to pick up. There are still quite a few jobs that need to be purchased. Our economy is affecting other countries, which has helped the slow down in the PVF market. However, things should recover and start showing signs of improvement within the next six months. Another manufacturer comments that due to economic conditions, this 4th quarter may become soft. Some manufacturers may drop prices just to get an order. The Houston and surrounding markets may save the quarter due to hurricane recovery.

STAINLESS STEEL FLANGES

Pricing ↓ Manufacturers of stainless steel flanges forecast price decreases of 5% - 7% with reducing raw material costs. High nickel alloy and chrome alloy flanges may reduce 10% - 15%.

Lead Times — Lead times are forecast for 3—4 weeks with fill rates of 40% or more. Chrome is forecast for 6—8 weeks, and high nickel alloy is forecast for 12—16 weeks.

Comments — Manufacturers indicate distributor purchasing for stainless is cautious for inventory due to the drop in nickel pricing. The most volatile issues facing manufacturers are nickel pricing, volatile foreign exchange rates, high energy and gas prices, and unapproved import pricing.

CARBON STEEL PIPE - SEAMLESS, ERW AND CONTINUOUS WELD

Pricing Seamless ↑ **Welded** ↓ Pricing for carbon steel seamless pipe is forecast to increase 5% - 7% due to raw material costs, supply, capacity, demand, and labor following a new labor agreement at U.S. Steel. Carbon steel weld pipe is forecast for a decrease of 10% or more.

Lead Times - Fill rates for carbon steel is running 60 - 70%. Commodity material is shipping in 6 - 8 weeks for welded pipe and 3 - 4 months for seamless pipe.

Comments — Early indications are for a soft welded pipe market thru the 4th quarter. Dumping suits are pending for ERW from China and Korea. US Steel Tubular announced a \$200 per ton increase for all seamless and line pipe products effective for shipment in October 2008 or later. According to their letter, orders that were already placed will also be increased \$200 as well as all new orders. United States Steel (Pittsburgh) and ArcelorMittal (Chicago) reached separate agreements on new four-year labor contracts with the United Steelworkers. U.S. Steel reached their agreement in early August that covers 16,000

workers employed at Granite City, Ill.; Gary, East Chicago and Portage, Ind.; Ecorse, Mich.; Braddock, Clairton, West Mifflin and Fairless Hills, Pa.; Fairfield, Ala.; Lorain, Ohio; Keewatin and Mt. Iron, Minn.; and Lone Star, Texas. This contract is the new standard in the industry. A second four-year agreement was reached with 900 USW employees at the company's tubular products Texas Operations division. ArcelorMittal and the United Steelworkers reach their agreement two days after the union membership authorized it bargaining team to call for a strike. The four year contract covers 14,000 steel workers at 14 U.S. plants. The deal was struck without any disruption to business operations.

China's output of steel products totaled 47.8 million metric tons in August, down 0.2% year over year. This marks the first decline in 10 years according to the State Statistics Bureau of China. China's price of steel has dropped for 10 consecutive weeks. For the past six years, China has experienced a growth of more than 20% per year. Russia's largest steelmaker, OAO Severstal, is cutting October production by as much as 30% due to the weaker global economy.

CARBON STEEL WELD FITTINGS AND FLANGES

Pricing: Fittings ⇔ Flanges ↓ Manufacturers indicate price reductions of 3% - 5% on flanges to match competition; however, butt welding fittings are expected to remain stable thru the end of the year.

Lead Times — Lead times for commodity material is 3—4 weeks with fill rates of 80% - 90%. Non-stock specials are forecast for delivery in 6—8 weeks.

Comments — The price of A106B seamless pipe and lack of availability is pressuring scheduling in production to meet demand; however, most manufacturers are still meeting the 3—4 week lead time. There are no

indications in the industry for pursuing anti-dumping litigation for carbon steel welding fittings or forged steel flanges. Pricing for steel scrap has softened somewhat. The weakening of the US dollar, higher energy costs, strong offshore demand, higher costs and longer lead times for offshore materials and strong demands in the energy sector are placing stronger demands on domestic production. Tenaris, a Luxembourg manufacturer of tubular goods and related products, has announced plans to build a plant in Mexico. The 450,000 tonnes capacity facility will produce up to 7-inch diameter piping for the oil and gas markets.

FORGED STEEL FITTINGS

Pricing ⇒ Pricing from manufacturers is forecast to remain stable this quarter for forged steel fittings following the price increase announced on 8/25/2008.

Lead Times — Fill rates of 95% with deliveries forecast for 1 - 3 weeks for commodity forged steel material not in stock. Specials are forecast for 3 - 4 weeks.

Comments - Manufacturers comment that the weak dollar continues to prevent European competition. The former demand of AML approved material has moved to domestic. The scrap prices have reduced to March levels, thus decreasing special bar quality steel used to manufacture forged steel and branch connections. This reduction will alleviate discussion regarding additional forged steel / branch connection increases in the near future.

STAINLESS STEEL GATES, GLOBES, CHECK VALVES

Pricing ⇒ Pricing for stainless steel gate, globe and check valves is expected to remain the same thru the end of the 4th quarter.

Lead Times — Deliveries for commodity items is forecast for 6 – 12 weeks with fill rates improving to 60% - 70%. Non-stock specials are forecast for 16 — 20 weeks or more.

Comments — The demand for stainless steel valves is strong. Pricing is currently stable with raw materials for stainless valves.

BRONZE AND IRON GATES, GLOBES AND CHECK VALVES

Pricing ⇒ No change is forecast for bronze or iron valves thru the end of 2008.

Lead Times — Deliveries are running 4 – 8 weeks for iron valves and 3 – 4 weeks for bronze valves. Fill rates remain around 80% for both bronze and iron valves. Non-stock specials are forecast for 12 — 16 weeks for iron valves and 6 — 12 weeks for bronze valves.

Comments — Bronze valve pricing is stable currently. Price declines are predicted for copper in 2009. However, copper and brass scrap remains in strong demand, but supplies are limited not only by low operating rates at brass mills but also the absence of building demolitions as a scrap source.

CAST STEEL GATES, GLOBE AND CHECK VALVES

Pricing ⇒ Manufacturers of cast steel valves are not forecasting any changes in the fourth quarter.

Lead Times — Fill rates are 60% - 70% for commodity cast steel valves with deliveries forecast for 6 - 8 weeks on commodity cast

steel with specialty cast steel valves running 16 — 20 weeks or more.

Comments — The costs of molybdenum are expected to increase in 2009 driving up the pricing on chrome alloy valves.

FORGED STEEL GATES, GLOBES AND CHECK VALVES

Pricing ⇒ No price change is forecast for forged steel valves during the fourth quarter of 2008.

Lead Times — Standard commodity forged steel valves are shipping in 6 - 12 weeks. Fill rates are running 50% - 70%. Deliveries of special non-stock forged valves are forecast for 8 – 16 weeks or more.

Comments: Flowserve (NYSE: FLS) has been named to join the select membership of the S&P 500 Index. They are a leading provider of flow control products and services for the global power, chemical, water, oil and gas industries. They are manufacturers of Vogt forged steel valves.

QUARTER TURN VALVES - BALL AND WAFER

Pricing ⇒ No changes are forecast in the quarter turn valve market during the last quarter 2008.

Lead Times — Fill rates are running 50% - 70% for commodity material with lead times of 6 – 8 weeks. Non-stock specials are forecast for 12 – 16 weeks or more depending on the material. One manufacturer notes that they are depending more on foundry sources for machined components.

Comments — Manufacturers indicate that supplier backlogs remain high; however, they are concerned over the possibility of a global slowdown that might eventually reach the Energy and Hydrocarbon processing markets. Customers in the “Tar Sands” region of Canada have serious concerns with projects that may be cancelled or delayed because of limited financing from major banks. Market competition remains high from India, Korea, and the European Union for high end metal seated valves.

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This means that the world's energy needs will face complex challenges on many fronts. These include access to the resource base for fossil fuels; availability of an adequate workforce, specifically engineers and skilled tradesmen; and the availability of materials. It is notable that the North American component is about 20%, roughly \$200 Billion per year. To put this into perspective the oil and gas companies were investing about \$150 Billion per year as of 2006. This is where the "obscene" profits generated in the Oil and Gas industries are being re-invested in the future to meet the energy needs of this country.

We feel that even with the softness being experienced in the housing and light construction market the Mechanical Contractor's Markets will remain strong through the end of this year, soften a bit in certain pockets during 2009, but still generating a significant demand for our products. The heavy construction segment will remain quite active through 2008 and well into the future. Many of the projects that are commencing have their financing in place and FERC approvals. How does this influence our sector of the economy? Prices will continue to experience upward pressure and the availability of material will be strained for our sector of the economy. I want to discuss here today the reasons behind this position:

- To begin, the basis for steel pricing is the cost of iron ore and steel scrap. BHP Billiton and Rio Tinto along with ArcelorMittal have increased the price of iron ore 85% this year and are expected to seek another 50% increase in 2009. These signals indicate that the price per ton of steel will remain high and even if the market softens a retreat in pricing will not revert to 2007 levels.
- Steel scrap has softened off the peak of \$700+ per ton. However, the price has not retreated to 2007 levels. The international markets have taken a breather due to the Chinese halting industrial production and construction to preserve air quality during the Olympics. We fully expect that they will resurface in the ensuing months.
- In addition, India, Russia, South America and developing Pacific Rim countries are competing for energy, steel products including pipe and building materials on a global basis. These countries are engaged in aggressive programs to bring energy and modernization to their emerging markets as quickly as possible. Their appetites for materials in concert with the appetite of the Chinese are impacting all aspects of a global market.
- Carbon steel seamless pipe is a key raw material for the manufacturing of welding fittings. The demand for seamless pipe is a record high as a result of market activity in OCTG sector due to the current boom in drilling. This demand affects both the availability and price per ton for the A106 seamless pipe required for the manufacturing of carbon steel fittings. Carbon steel seamless pipe increased in price by 8.6% from July 2008 to August 2008 (\$3,250 vs. \$2,992.00). The reason is that the demand remains high and the sources for seamless pipe worldwide are limited. We find that this scenario pertains to the forging industry as well. Increased demand and limited production capacity has resulted in upward pressure on pricing and constraints on availability of raw forgings.
- Exacerbating the situation a major offshore supplier of raw and finished forgings declared bankruptcy resulting in a strain on the market for forged flanges. These issues are causing the industry to look to domestic resources versus depending on the uncertainties of the offshore suppliers.
- An additional phenomenon that is influencing both price and availability is the higher costs of offshore materials including flanges and fittings. The world price for steel, the limited production capacity for seamless pipe and the high cost of energy have leveled the field making the domestic material more competitive and reliable.
- The cost of transportation is a factor influencing the turn toward domestic production, as well as the cost and availability of offshore materials. There is a shortage of container ships that deliver the goods from the Far Eastern producers resulting in higher prices and longer delivery times. The cost of operation has also risen as a result of higher oil prices. In December of 2006 a container ship roughly had a daily cost of operation of \$60K; in December 2007 the cost had risen to \$200K+ per day. The average stay in port for unloading had risen from 2 days to six days.
- Quality has also become an issue that is influencing the decisions to return to domestic producers. Substandard pipe, substandard pipe fitting and flanges have surfaced in significant numbers this year resulting in financial losses for those involved. It has become apparent to many in the industry that utilizing quality products for piping systems that are at the core of the project is cost effective for the owner and the contractor.

The main problems that concern our industries are the same concerns that the global markets are experiencing; availability of human resources and the availability of building materials including PVF products. The projects referred to previously will be influencing the PVF global and domestic industry for more than a decade placing a demand on our production resources not seen since the development of our national pipeline/refinery infrastructure. In conclusion, predicated on the activity foreseen in two out of the three segments of the economy our industry addresses, pricing and availability of carbon steel welding fittings and flanges will remain under pressure for the remainder of the year and through 2009.

Wishing you the best this Holiday Season!



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