

The outlook for the global LSAW markets

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HATCH



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- **Hatch Beddows overview**
- **Global LSAW line pipe market overview**
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- Established 1955 and employee owned
- 8000 highly skilled people serving clients worldwide
- US\$16BN of projects now under management in 60 countries

- **Our values**

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- Innovation
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- Effective risk management

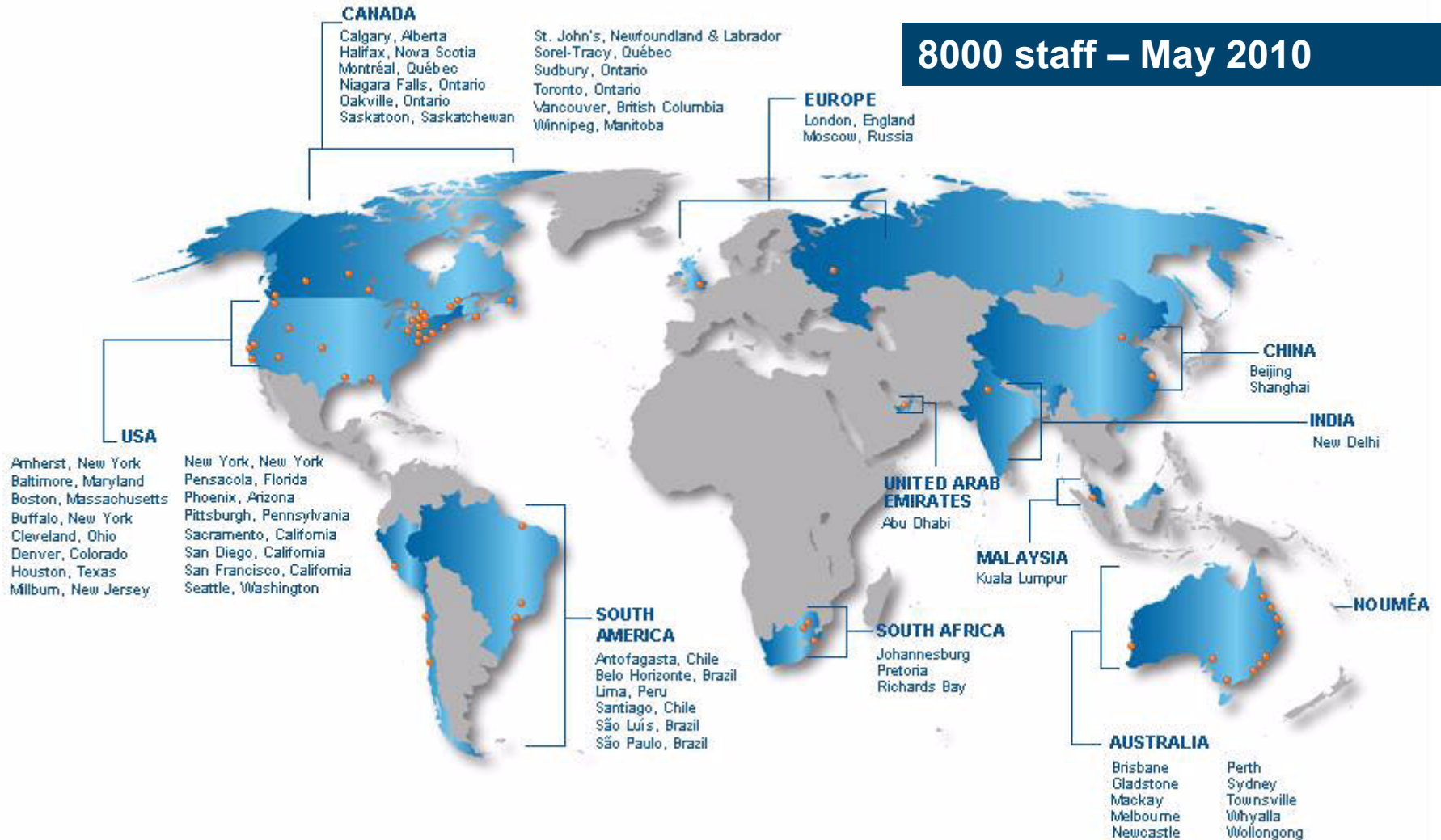
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- Hatch Consulting is organised into specialised practices by industry and service, combining to provide precise solutions, expertly delivered to the exact needs of each individual client
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THE OUTLOOK FOR THE GLOBAL LSAW MARKETS
Global reach and resources

8000 staff – May 2010



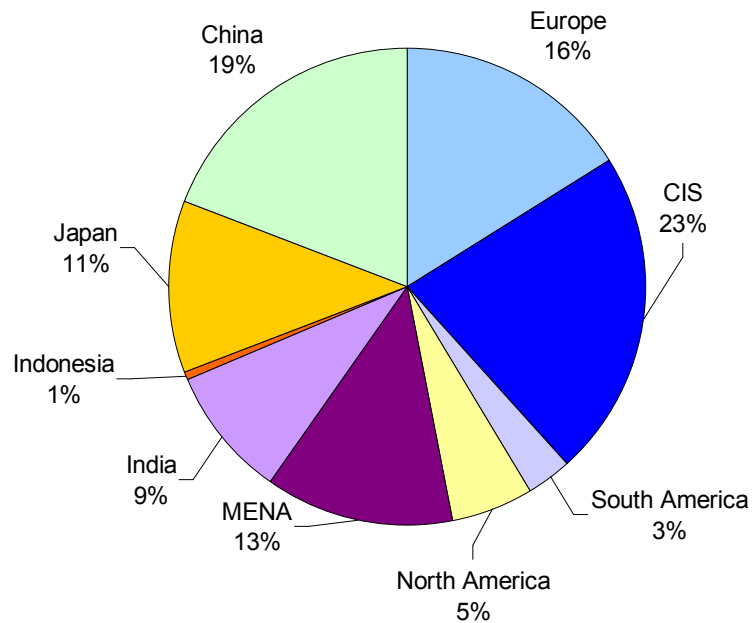
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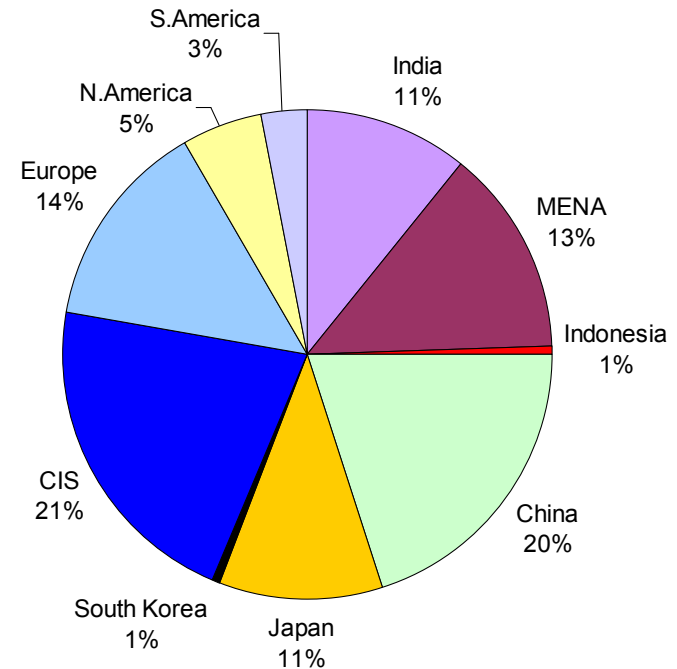
GLOBAL LSAW PIPE MARKETS OVERVIEW

Global LSAW capacity has risen sharply in 2009, and this has primarily been driven by expanding capacity in China which is quickly closing in on the CIS to have the worlds largest capacity

Global LSAW line pipe capacity in 2008 by region



Global LSAW line pipe capacity in 2009 by region



2007 global capacity	19.5Mt
2008 global capacity	20.0Mt
CAGR 07 - 08	2.9%

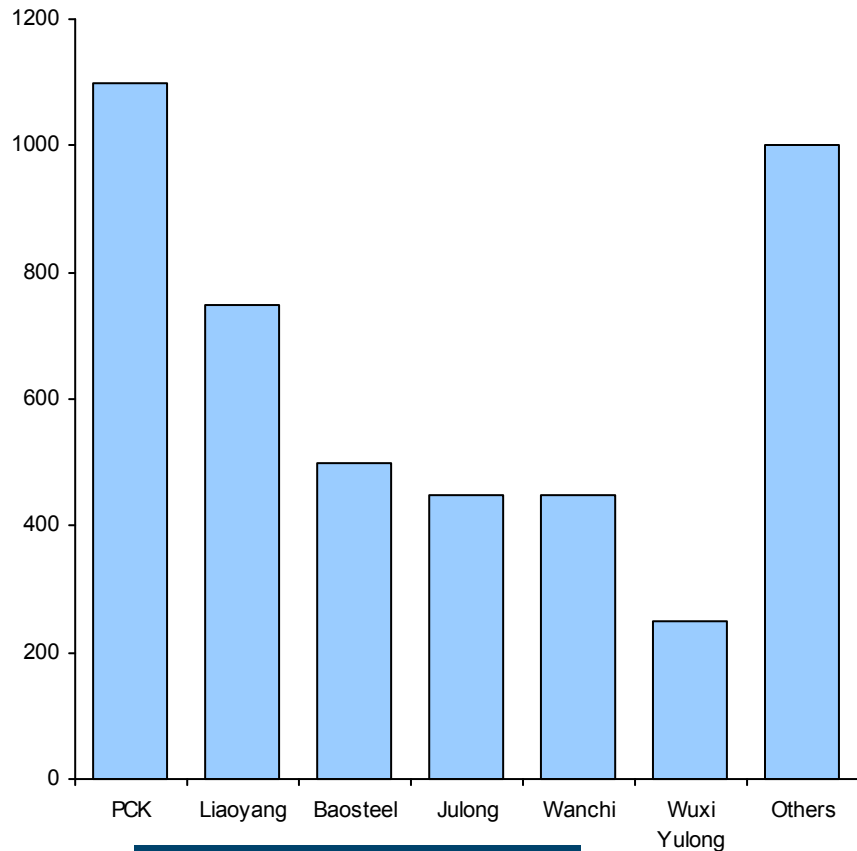
2008 global capacity	20.0Mt
2009 global capacity	23.0Mt
CAGR 08 - 09	25.3%

Source: Company data and Hatch estimates

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China now has twelve LSAW manufacturers that can make API line pipe. In total there are around 35 LSAW producers in the country but most focus on non-API markets

Largest Chinese LSAW mills by capacity in 2009 (kt)



Total capacity = 4.5Mt

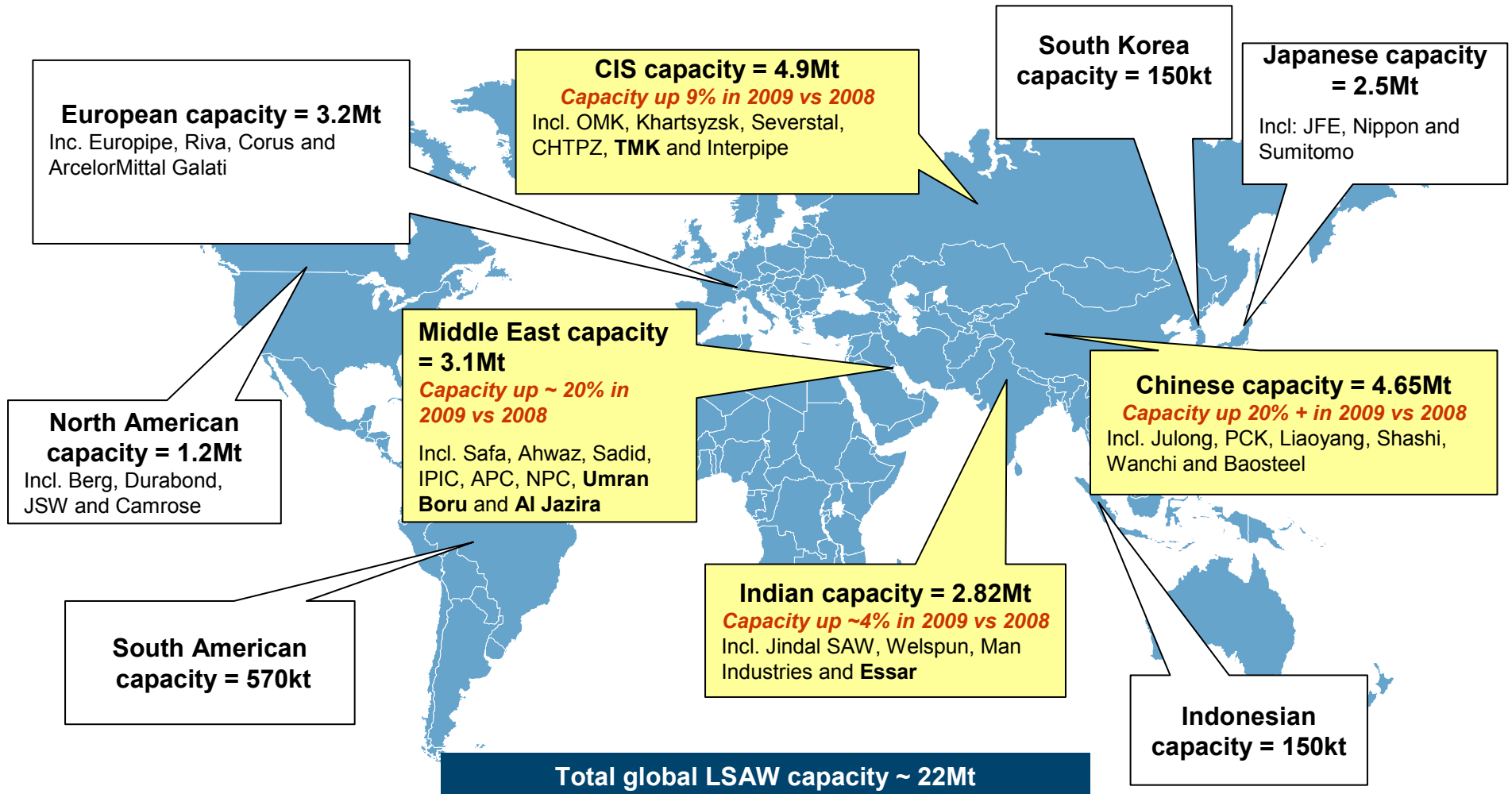
Others include: Shagang, Yalian, Yueyuechao, Zehua and Shashi Steel Pipe

Source: Interviews and Hatch

- Of China's 12 leading LSAW manufacturers there are five UOE lines (one with PCK, three with Liaoyang) and one with Baosteel
 - There are then a further 13 JCOE lines (two with Julong, PCK and Wuxi Yulong) with the top 12 manufactures
- Capacity expansions are continuing in the country in 2010 with PCK adding a fourth LSAW line and BSS (Boaji) installing a second JCOE line
- Some of the Chinese LSAW manufacturers have been open to sourcing pipe mills from the West, most noticeably Shashi, Julong, Baosteel and BSS (Baoji)
 - However, some of the leading manufactures in the country are understood to source their pipe mills from local Chinese plant manufactures

As well as rising capacity in China, LSAW capacity also increased in the CIS MENA and India in 2009

Global LSAW pipe making capacity by region in 2009

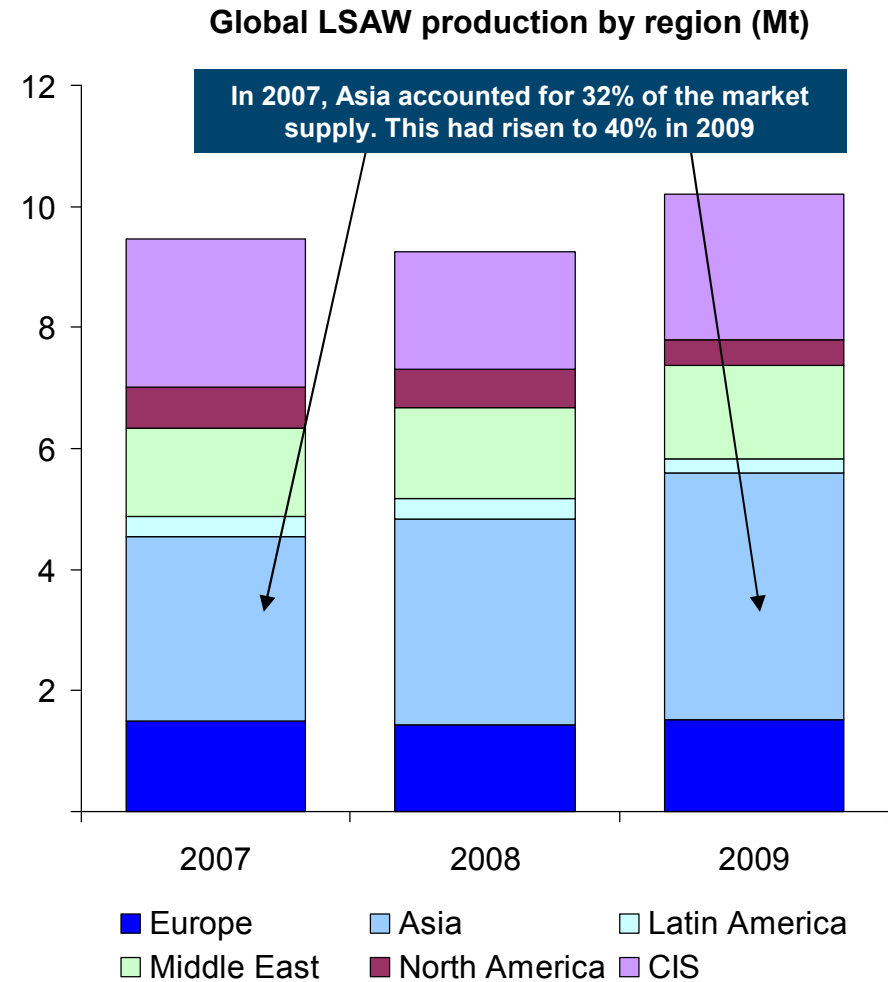
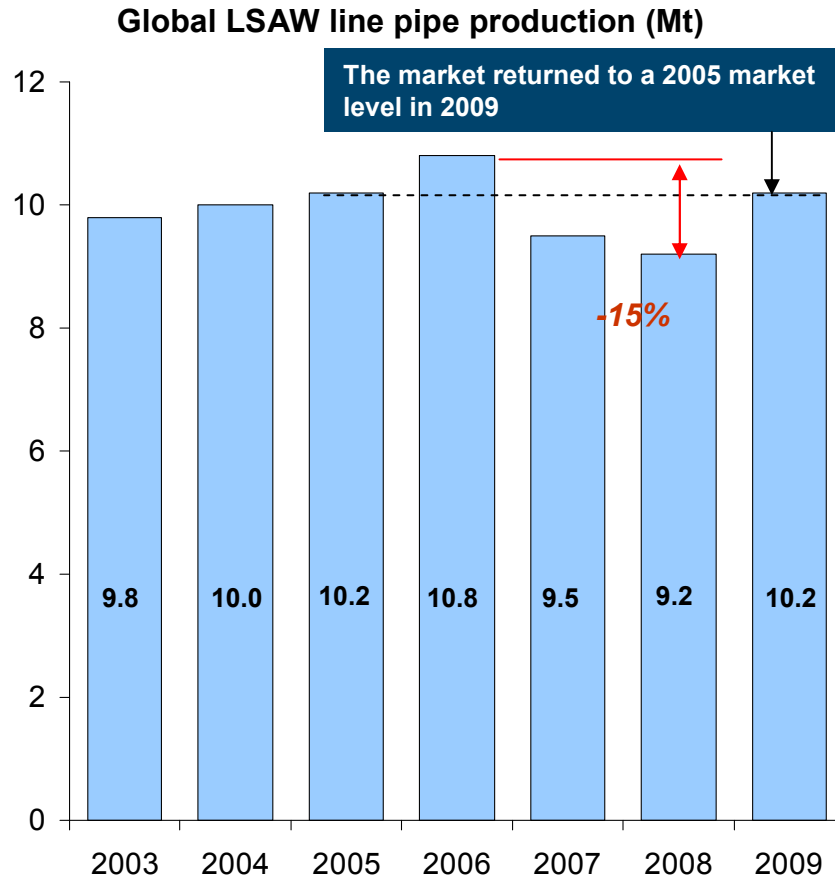


Source: Company data and Hatch

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GLOBAL LSAW PIPE MARKETS OVERVIEW

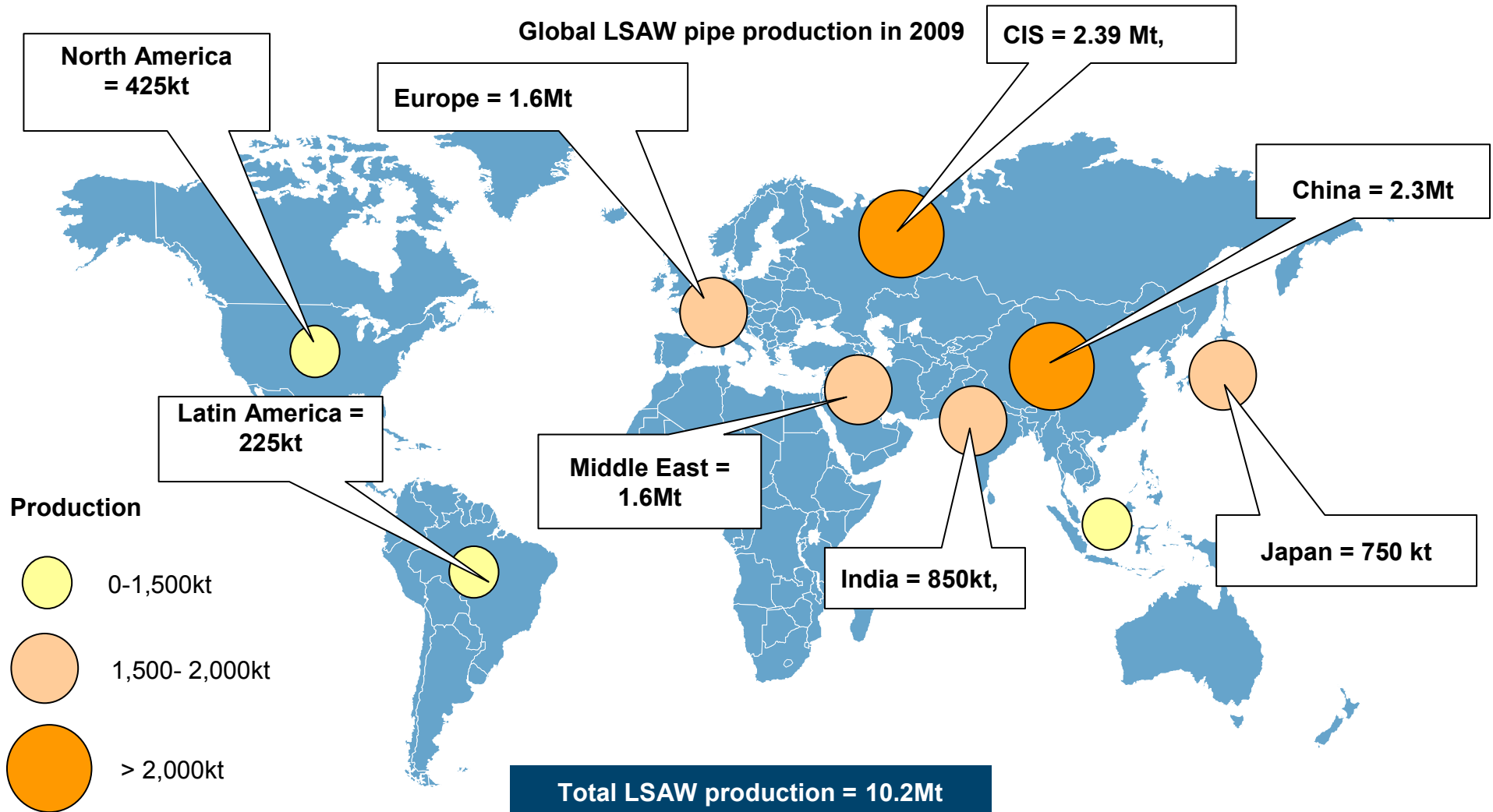
LSAW line pipe production slipped in 2007/8 as mills in Russia and Japan struggled to fill order books. Production picked up in 2009 in the market however as Mega projects in Europe and Asia progressed



Source: Interviews with global LSAW mills and Hatch

GLOBAL LSAW PIPE MARKETS OVERVIEW

The CIS and China are now the largest producing regions for LSAW, with production also rising in the Middle East and India

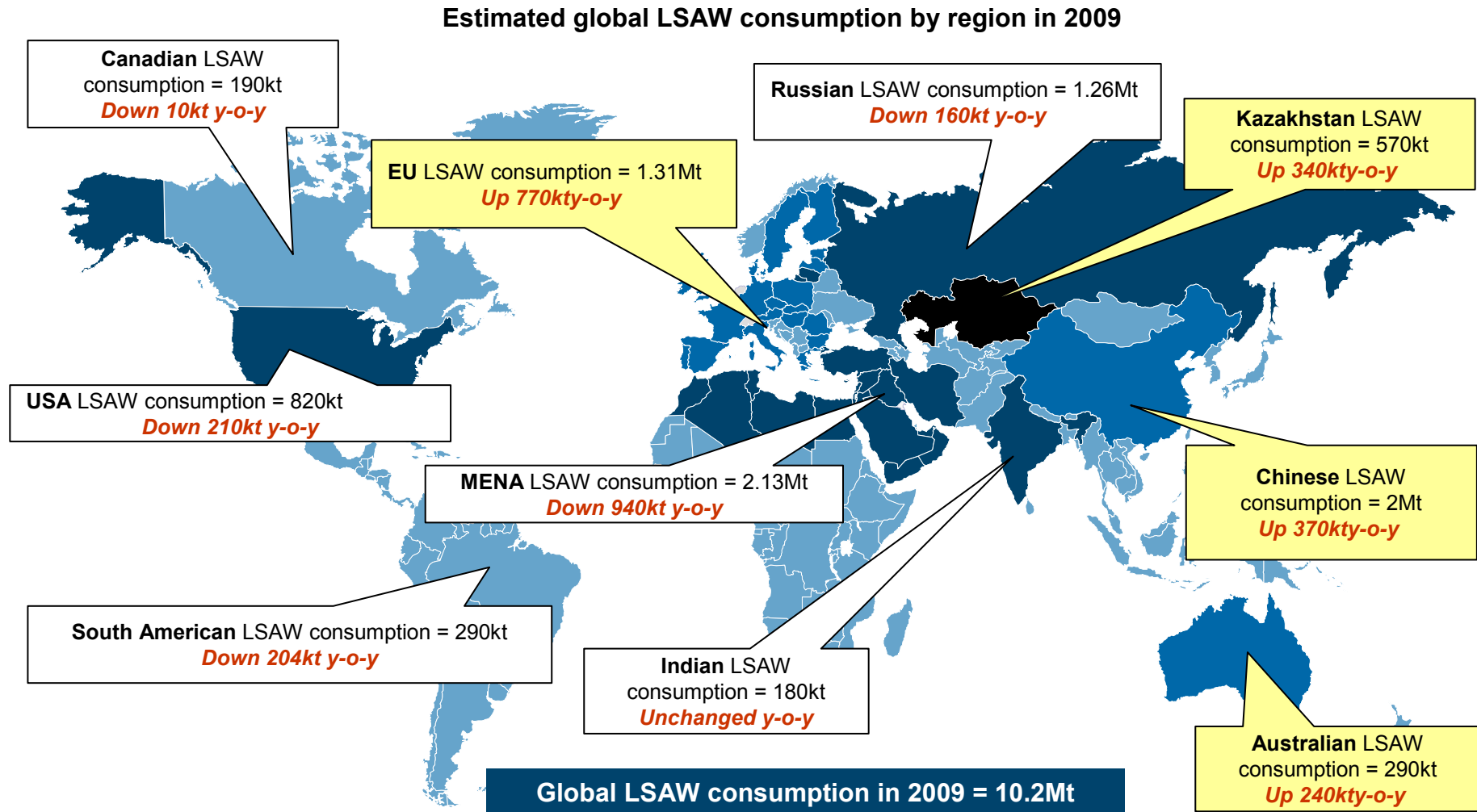


Source: Company data and Hatch

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GLOBAL LSAW PIPE MARKETS OVERVIEW

In 2009 the EU has seen a sharp rise in LSAW consumption due largely to the NordStream project. China, Australia and Kazakhstan also performed well with LSAW demand in MENA slowing



Source: Company data, ISSB and Hatch

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Moving into 2010, further improving demand is expected with the bright spots being Russia, Europe, China, SE Asia and Australia

- Russian LSAW mills have seen a rise in production in 2009 and order books are strong into 2010. A number of domestic projects such as Bovaneково-Ukhta and the East Siberia Pacific pipeline is keeping mills busy
- The Nordstream project has helped to also keep Russian and European LSAW mills busy, with increasing activity in the North Sea also benefiting European LSAW producers
- Chinese mills continued to see strong internal demand as the country plans to expand its total gas pipe line length from 34,000km currently to 48,000km by 2015, this is currently being led by the building of the Second West-East Gas Pipe line which is set to be completed by 2011
- India LSAW mills all saw a pick up in LSAW production in 2009 vs 2008 – the main reason cited for this was the minimal difference in HRC costs vs plate costs meaning that they could be as competitive with LSAW as they were with HSAW and their end-use customers preferred LSAW over HSAW
- North American LSAW producers have struggled however with the market in 2009. The build up in local HSAW capacity has made the US market far more competitive and LSAW producers in the USA struggle with higher substrate costs than their HSAW counterparts
- Japanese mills who in 2009 were extremely price competitive have seen utilisation rates rise into 2010 as LSAW demand recovers in Asia and Australia

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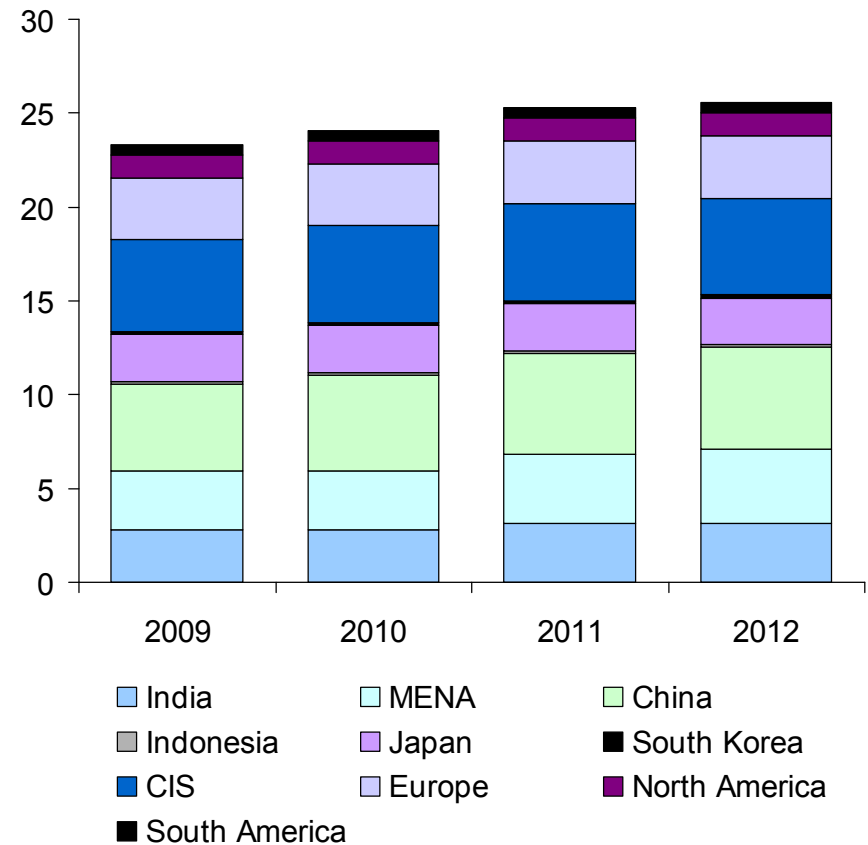
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FORECAST LSAW LINE PIPE MARKET OUTLOOK

Global LSAW capacity is set to rise by a further 3Mt over the next three years, with around half of this new capacity expected to arrive in China

- Based on know expansions LSAW capacity worldwide is forecast to rise from 22.6Mt up to 25.6Mt by 2012
 - China will lead this capacity expansion growth adding another 1.5Mt of capacity
 - By 2011, China is expected to have the largest capacity in the world for LSAW ahead of the CIS market (~ 5.4Mt)
 - The MENA region will follow China, adding another 900kt of capacity through to 2012
 - The MENA region will overtake Europe to have the worlds third largest capacity behind China and the CIS
 - The CIS and India will both add around a further 300kt of LSAW capacity each

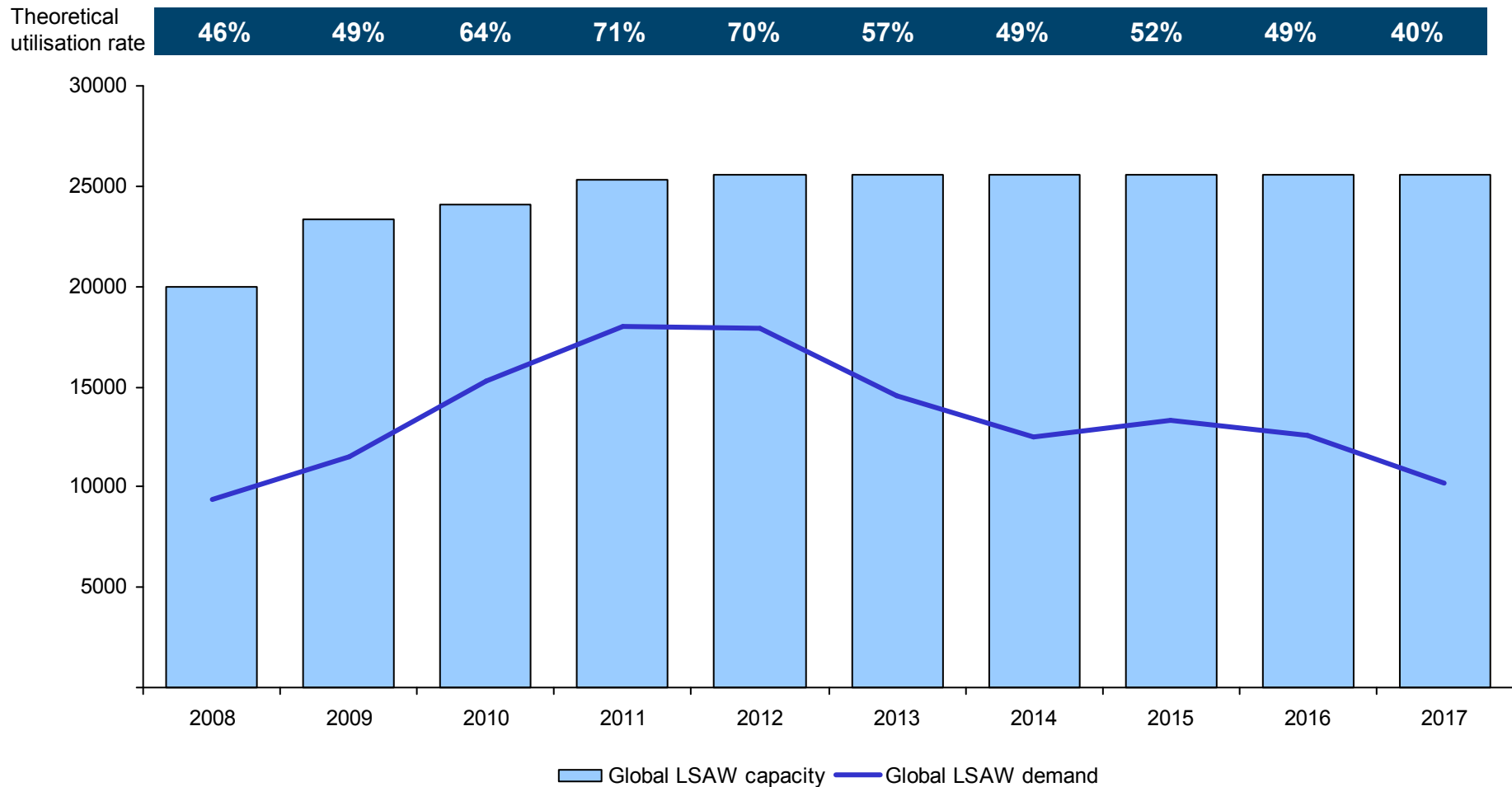
Forecast global LSAW capacity (Mt)



FORECAST LSAW LINE PIPE MARKET OUTLOOK

Nonetheless, LSAW demand is currently forecast to increase in 2010 through to 2012, and despite new mills coming on stream, in the short-term average global utilisation rates should rise

Forecast global LSAW demand, capacity and theoretical mill utilisation (kt)



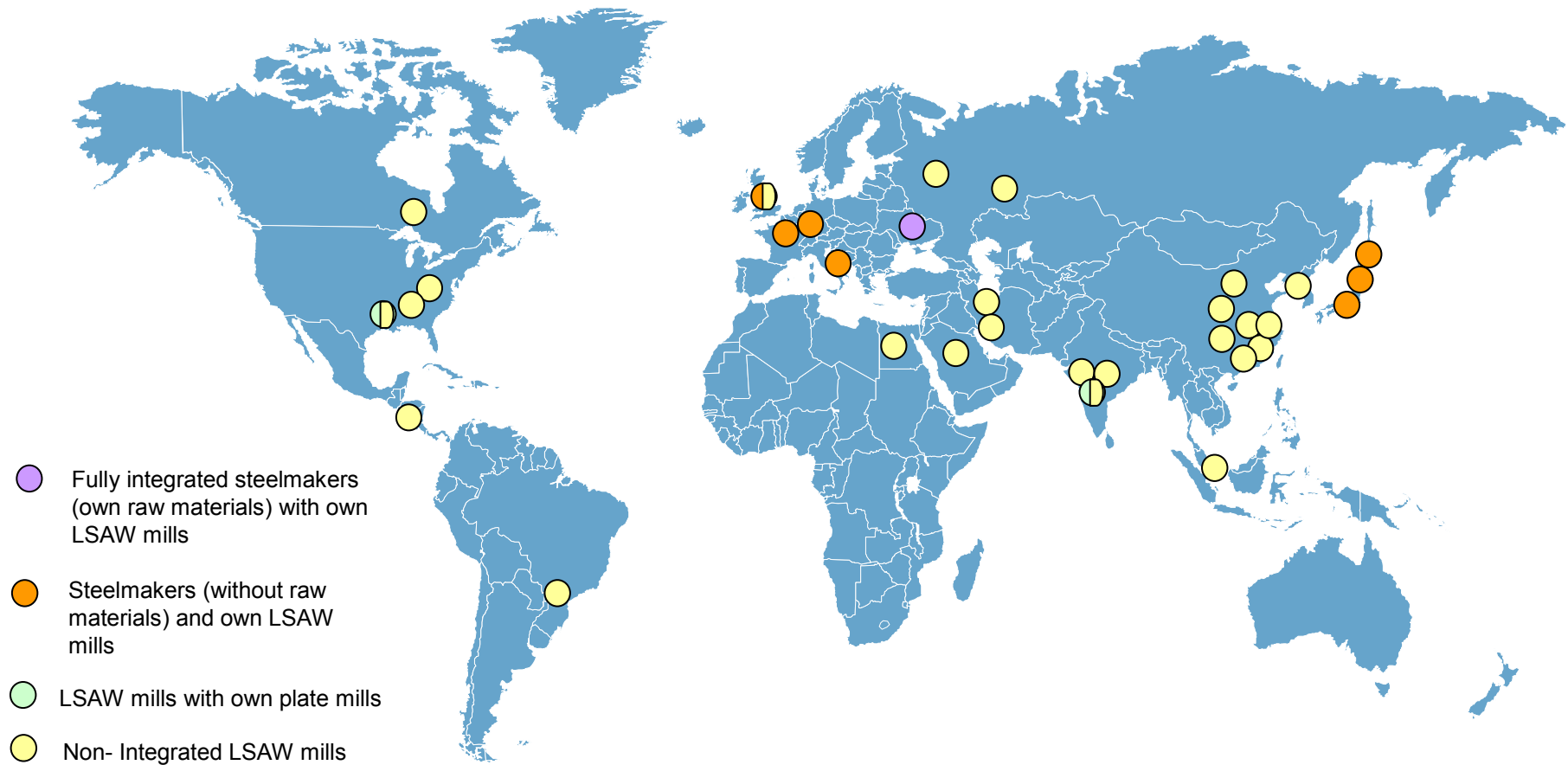
Source: Simdex, Company data and Hatch estimates and analysis

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FORECAST LSAW LINE PIPE MARKET OUTLOOK

While demand is forecast to rise, the market for LSAW pipes is banging. Five years previously European and Japanese LSAW manufacturers tended to dominate the global supply of LSAW line pipe

Global API LSAW pipe producers by level of integration 2005



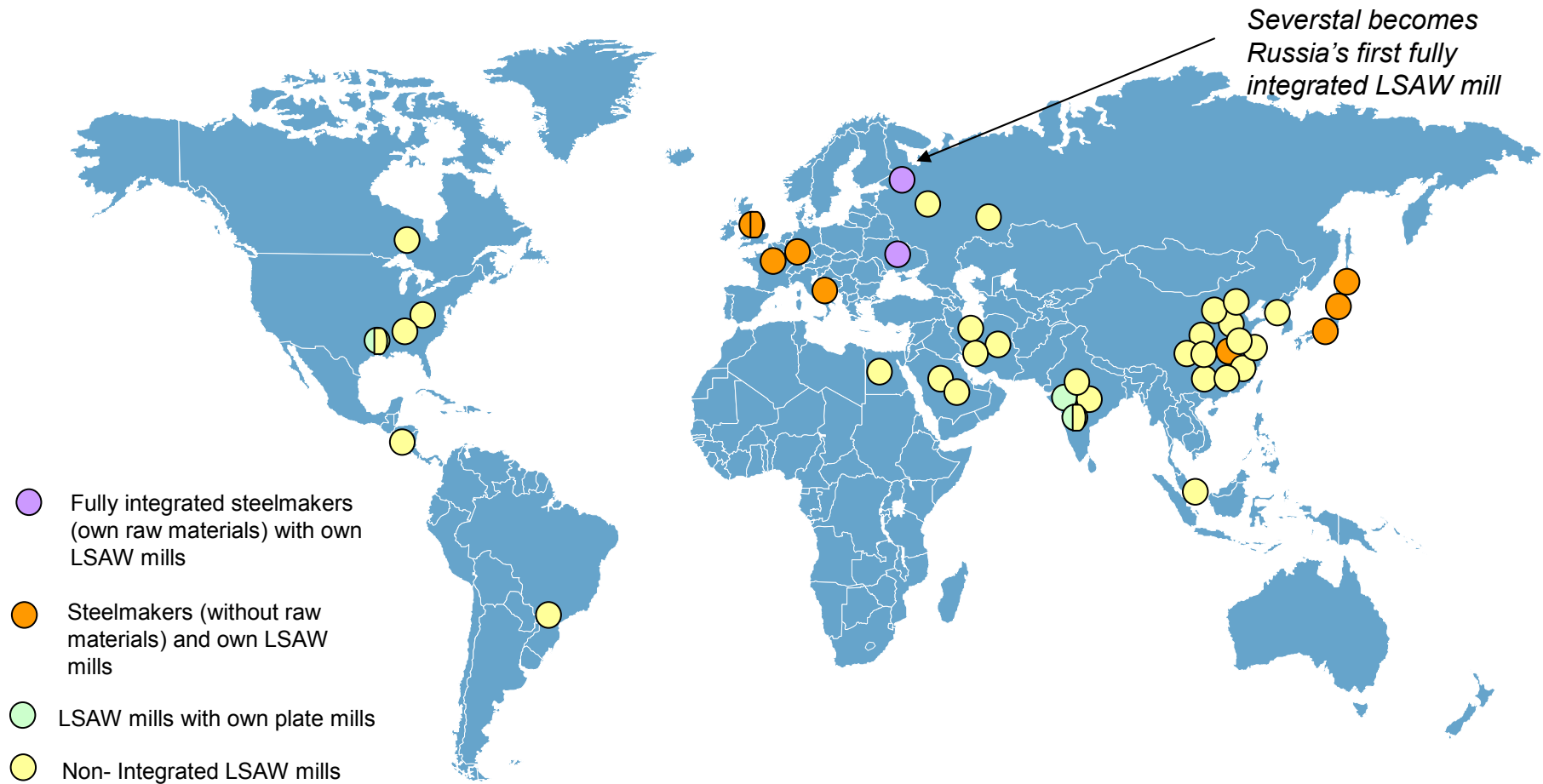
Source: Hatch

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FORECAST LSAW LINE PIPE MARKET OUTLOOK

By 2009 these mills are facing greater competition from mills in India in competing for global projects. New producers also entered the markets in MENA, Russia and China

Global API LSAW pipe producers by level of integration 2009



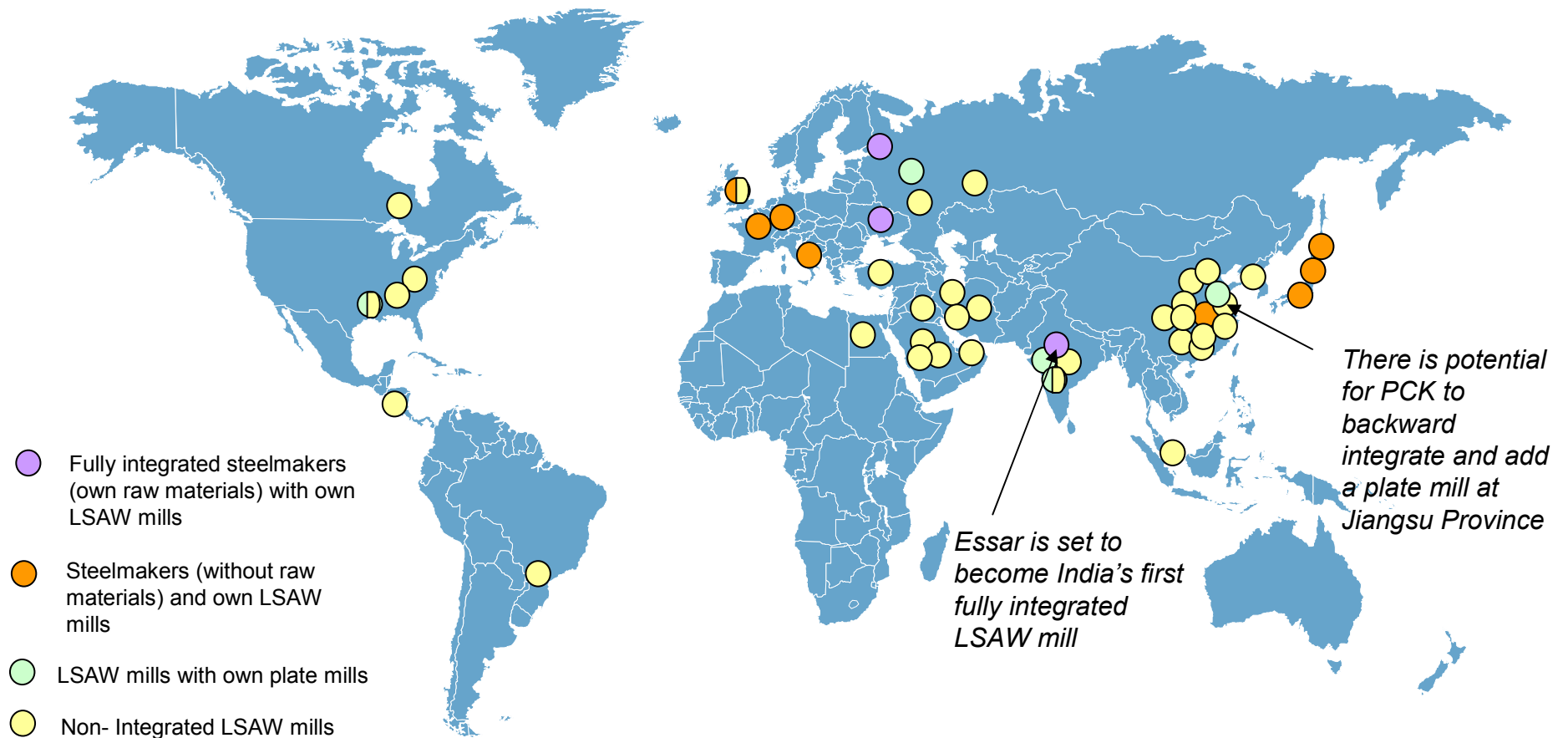
Source: Hatch

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FORECAST LSAW LINE PIPE MARKET OUTLOOK

By 2012, India should have a fully integrated LSAW mill, Russian LSAW mills are also increasingly backward integrating increasing their competitiveness. MENA and Chinese LSAW capacity has continued to rise

Global API LSAW pipe producers expected by 2012



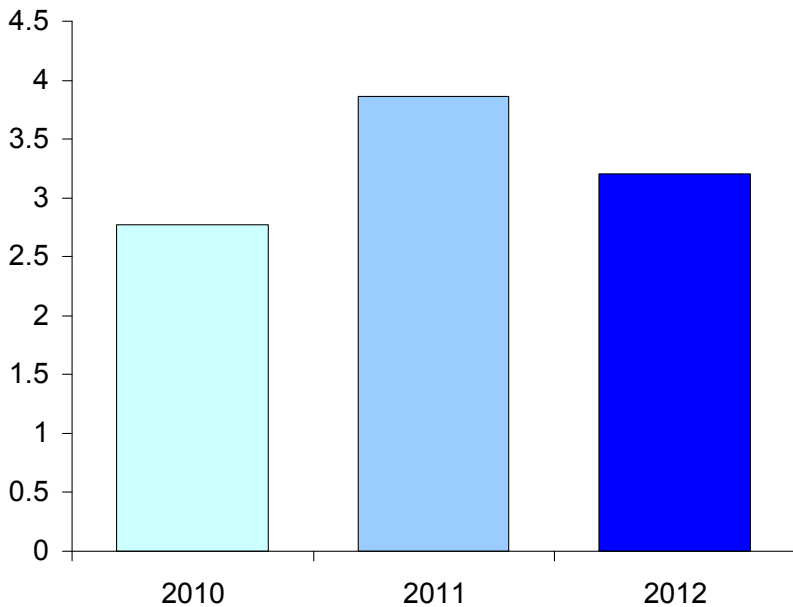
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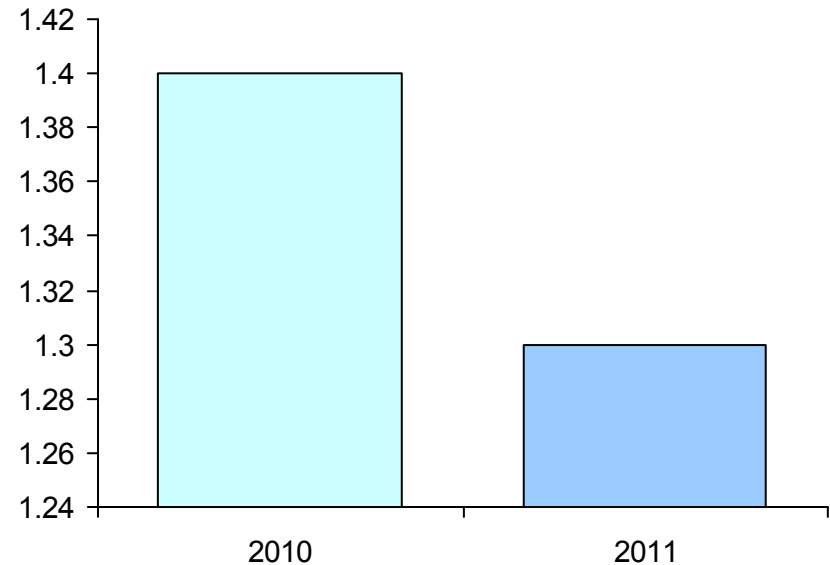
FORECAST LSAW LINE PIPE MARKET OUTLOOK

We have revised our view of last year - Russia is unlikely to have an immediate over-supply of LSAW. Based on demand forecasts China though could join India, Japan and Europe in the global export market

Forecast Russian LSAW demand 2010 – 2012* (Mt)



Forecast Chinese LSAW demand 2010 – 2012* (Mt)



* Demand also includes Russian and Chinese projects running to neighbouring countries

Theoretical Russian LSAW mill utilisation rate

2010	2011	2012
66%	93%	77%

Theoretical Chinese LSAW mill utilisation rate

2010	2011
30%	24%

Russia could find it needs to import LSAW in 2011/12 to meet local demand

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CONCLUSIONS

While the market outlook for LSAW manufactures appears healthy in the next couple of years – a ramp up in Chinese capacity could create concern for European, Japanese and Indian LSAW exporters

- The global LSAW market saw production decline 18% in 2008 compared to 2006. However in 2009 production picked up by 1Mt to 10.2Mt
- MENA saw a significant drop in LSAW consumption in 2009 (down 940kt y-o-y) but a strong rebound in growth in the EU, Kazakhstan, China and Australia (collectively up 1.7Mt y-o-y) more than outweighed this
- Global LSAW demand is expected to continue to rise in 2011 and 2012 with new capacity increases not expected to initially keep up with this demand leading to rising global utilisation rates
- The market dynamics are changing quickly though – Russian and Indian producers continue to backward integrate making them more competitive against European and Japanese producers. MENA local capacity is also rising
- Russian demand is expected to be exceptionally strong in the next couple of years and we expect that Russian mills will mostly focus their attention on satisfying domestic demand, with no significant extra capacity for exports
- China is expected to have the largest LSAW capacity of any region by 2012. Initial forecasts suggest demand won't keep pace with capacity in China and these manufactures could soon join European, Japanese and Indian LSAW manufactures as global market players

Thank you for your attention. For further information on our pipe and tube consulting please contact:



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