Southern African Institute of Steel Construction

Impact of steel prices on the Steel Construction Industry

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Dr Hennie de Clercq
Executive Director
Kobus de Beer
Industry Development Executive

Steel an important material

- “If it’s not made of steel, it’s made using steel”
- Enables industrial development
- Inexpensive (a kg of steel costs same as kg of Coke)
- Steel is green: sustained positive social, economic & environmental impact

Perspective on steel consumption

Country	kg / person	ton / $million GDP
SA	108	19
China	437	119
India	50	48
Brazil	129	16
Russia	228	26
Argentina	109	14
Thailand	192	49
Egypt	111	47
Iran	228	52
Japan	487	12
Germany	429	11

Steel in construction

- 40% of all steel is used in construction
- About 2,4 m tons plate & profile pa in SA
- 80 000 people employed
- Key enabling industry: have to have structure in place before machines can be placed etc - without structural steel industry, can't have other industries

The things we produce from steel

Structures for:

- Buildings
- Bridges
- Roads and railways
- Community buildings
- Stadia
- Shopping centres
- Communications

- Factories
- Transmission lines
- General industry
- Harbour cranes
- Agriculture
- Power stations
- Petrochemical plant
- Mining industry

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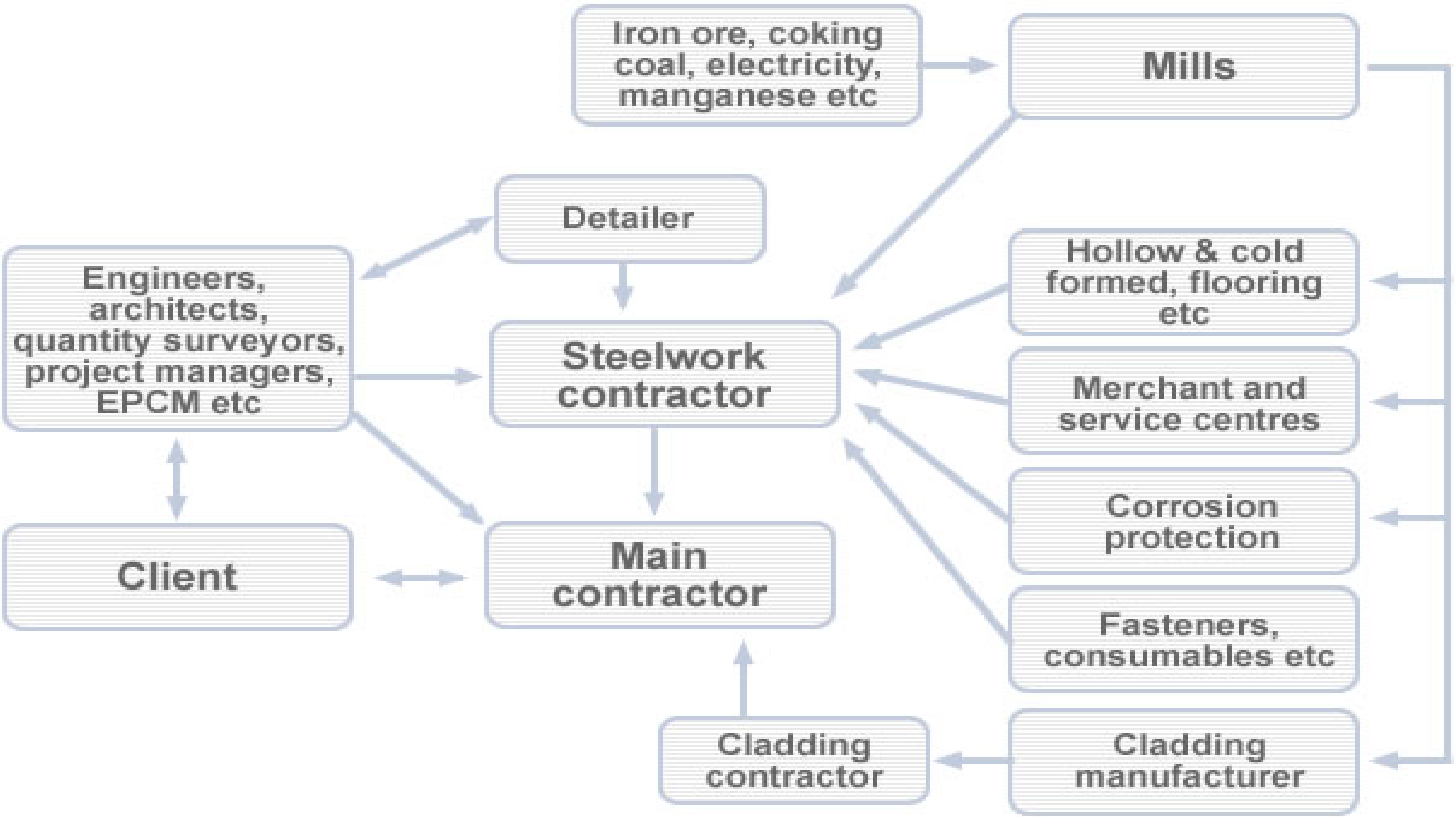
    - Third Outline Level
      - Fourth Outline Level
        - Fifth Outline Level

Also ...

- Cladding for roofs and walls
- Bolts
- Secondary steel products such as pipes
- Fencing and security
- Windows, door frames and other products for buildings or infrastructure

Steel in construction



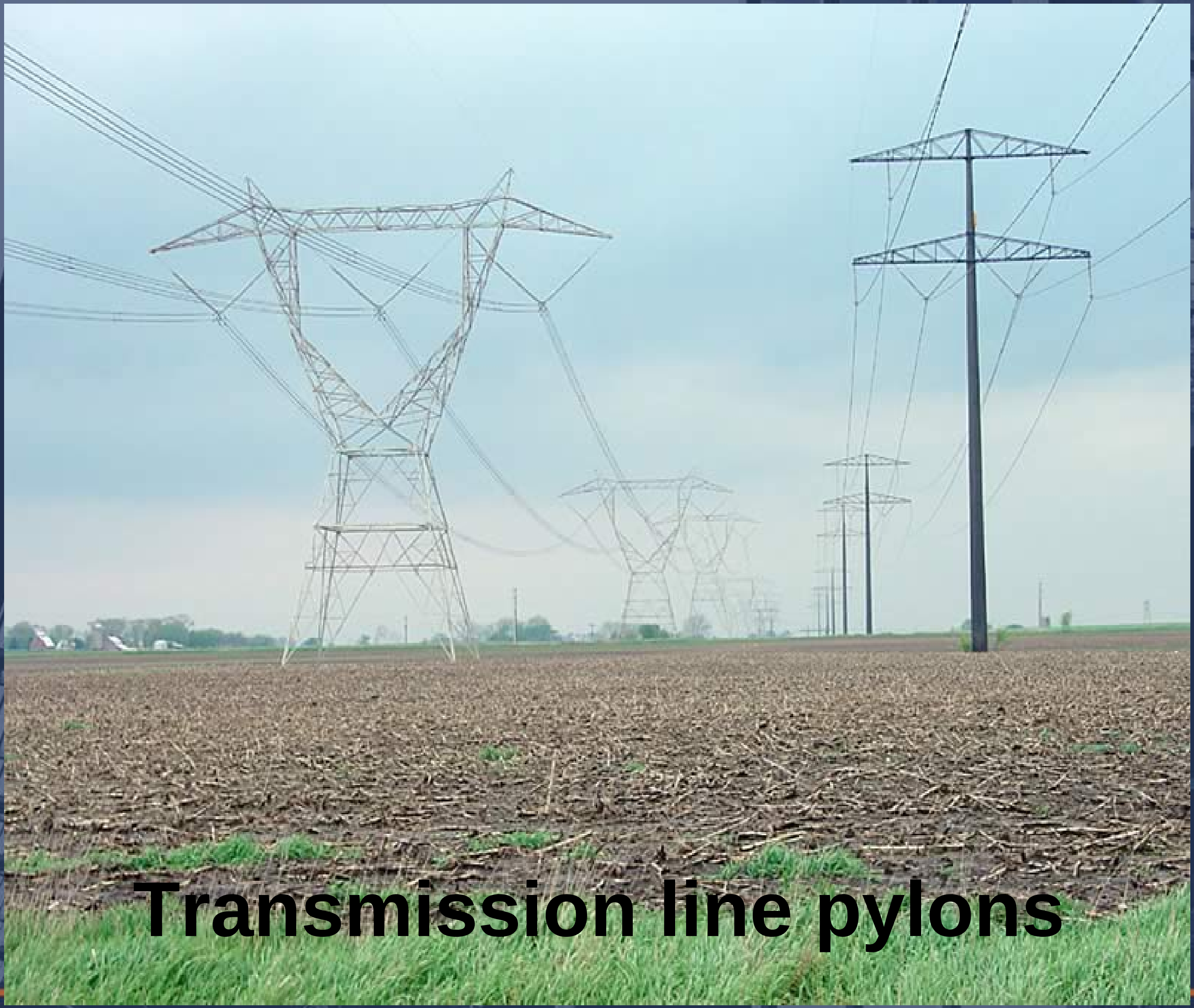
Examples of our work

Portnet ship-to-shore container crane
SAISC awards winner 2006

Examples of our work

Burj Al Arab, Dubai
SAISC awards winner 1998

Examples of our work

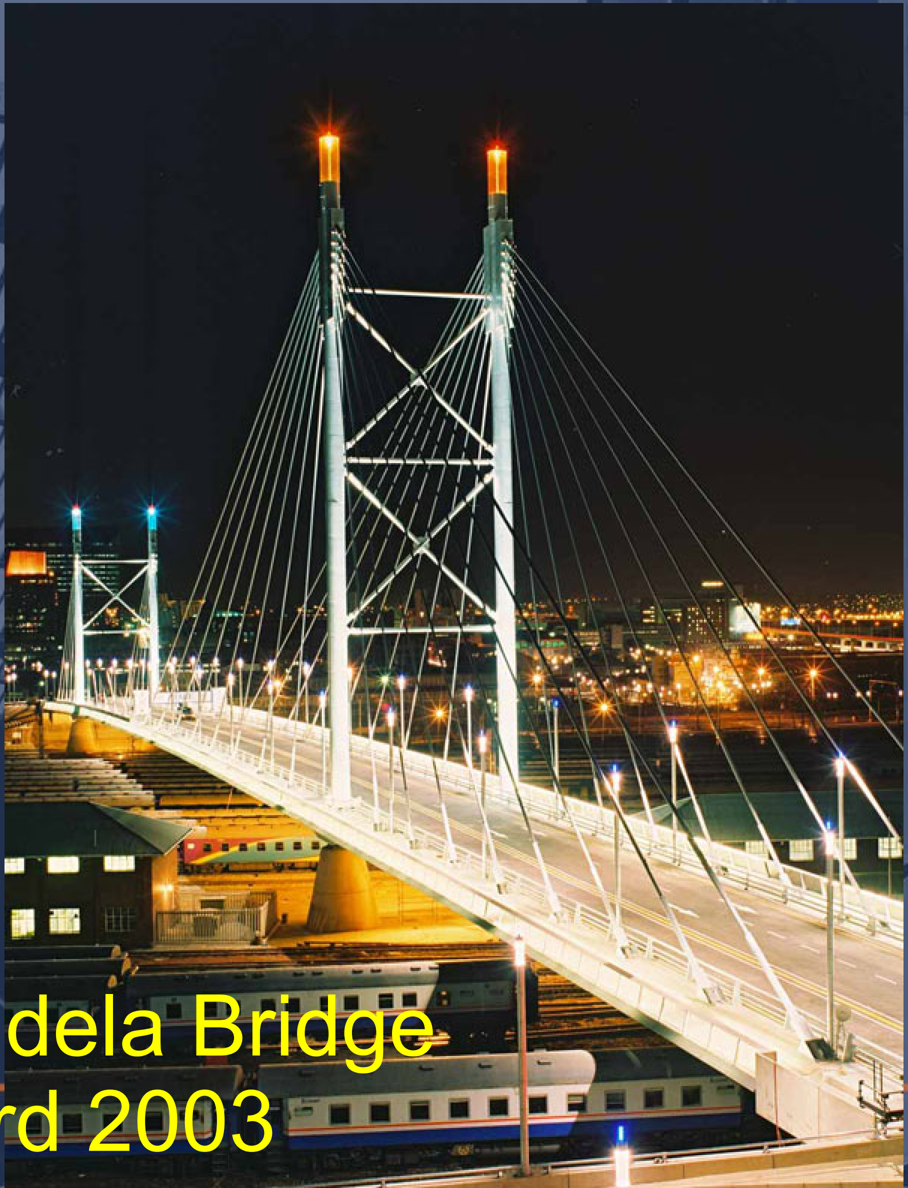


Transmission line pylons

Examples of our work

Soccer City Johannesburg under construction
SAISC overall award winner 2009

Examples of our work



Nelson Mandela Bridge
SAISC award 2003

SAISC Activities

- Technical: Handbooks, SABS standards
- Technical and practical advice
- Education and training
- Industry improvement
- Interact with decision makers in government and private sector
- Promote the use of steel (market development)
- Defend home market

SAISC export promotion

- Promote image of SA industry in target markets through export cluster, ISF
- Pursue projects in other countries – mobilise SA companies
- Surveillance of world and regional trends and opportunities
- Interact and co-operate with government

Influence of price of steel

- Steel price comprises 40% of the value of fabricated structural steel as a product
- Cost of primary steel price typically constitutes 2% to 8% of final project value
- Domestic competition – little practical effect on structures
- International competitiveness – major effect
- Tube & pipe, bolts, roof cladding etc price sensitive due to imports and substitute products from other materials

Examples of the influence of steel prices on product costs

- Automotive: 400 kg of AMSA steel per motorcar.
  An increase of R1 000/ton adds □R400.00 per car

- R1,8bn cement plant – steel 5000t, value R50m = 2,7% of project. Increase of 20% in steel price adds + 0,6% to the project. Thus not the determinant for project investments.

- Power pylons for ESKOM : Steel at R6500/ton ($800) (directly ex mill) comprises 40% of price. To match imports from India steel price must be R3500/ton. Thus other cost factors also important.

Value added imports articles of iron & steel

PRODUCT	2007	2008	2009	2010 (6m)	% of 2009 total
Wire & products	133 762 t	135 640 t	104 857 t	65 995 t	**28%**
Tube & pipe	129 032 t	132 402 t	118 077 t	63 992 t	**32%**
Fasteners	59 609 t	58453 t	42 693 t	24 389 t	**11%**
Structures	26 677 t	53 224 t	23 553 t	11 193 t	**7 %**
Others	109 561 t	120 856 t	80 202 t	51 150 t	**22 %**
Total tons	**458 641 t**	**500 575 t**	**369 382 t**	**261 719 t**	**100 %**
Total Value (SAR)	**R 7,259bn**	**R10,773bn**	**R 7,432bn**	**R 3,640bn**	

Value added exports articles of iron or steel

PRODUCT	2007	2008	2009	2010 (6m)	% of 2009 total
Wire & products	232 073 t	215 225 t	171 415 t	87 554 t	**34%**
Tube & pipe	177 990 t	174 330 t	106 733 t	57 751 t	**21%**
Fasteners	21 469 t	24 564 t	11 699 t	6 800t	**3%**
Structures	179 956 t	217 465 t	144 285 t	75 204 t	**28%**
Others	82 646 t	71 844 t	70 821 t	35 694 t	**14%**
Total tons	**694 134 t**	**703 428 t**	**504 953 t**	**263 003 t**	**100 %**
Total (SAR)	**R 7,75 bn**	**R11,53 bn**	**R 8,2 bn**	**R 4,07 bn**	

International Competitiveness Value added exports

- 500 000 t exported (R8,2 bn - R16 400 / ton)
- 370 000 t imported (R7,4 bn - R20 000 / ton)
- Structural: 6 times more export than import
- Structural exports 30% of all value added products:
  - 50% exported into Africa (40 countries)
  - Export to 115 countries world wide
  - Average product selling price R21 000 / ton
- AMSA's export incentives valuable
  - Provides target market steel price parity
  - Productivity / quality / technology / delivery / service / professionalism as important

Structural Steel Exports Tons per annum

Perspective on 12000 tons per month exported

15 tons per truckload
Thus 25 truckloads shipped or driven across borders every day of every month

Export / import strategy

- Most trading partners:
  - Subsidise and assist exports
  - Tax and deter imports
- SA: Too little incentive to export
- Too little import protection - took 1 year to get urgent application Gazetted
- SA grants permits to import complete projects - eg cement plants

State of local industry

- Did well until 2008, invested heavily in extra capacity
- Pursues CSDP with Eskom and others
- Government spending stopped, except power stations
- Mining industry in limbo because of uncertainty, while South America blossoms
- Strong and volatile Rand deters exports
- Jobs lost, companies going bust, closing facilities

Steel Construction Industry
New Opportunities

- Power lines
- Harbour cranes
- Sasol
- PetroSA
- Renewable energy
- Mining
- Exports / Import substitution

Conclusions

- Steel price is one of the determinants of a successful steel construction industry, but many other factors have a larger influence
- Domestic competition is on a level playing field for structural steel but certain products experience competition from imports and other materials
- Export is a prime growth opportunity
- Steel prices have a major influence on exports

  – also price fluctuations and R : $ exchange rates
- International competitors enjoy assistance and protection
- SA industry has little assistance or protection
- SA companies meet international standards

Recommendations

- Create a favourable environment for investments in RSA projects – industry will follow
- The mining industry needs to be supported
- Seek ways to support exports by the downstream industry, also through steel pricing
- Protect the industry against imported products (duties) and projects (legislation)
  - Strengthen interdepartmental co-operation
  - Establish fast track decision making
  - Involve industry associations

THANK YOU

Southern African Institute of Steel Construction
“We speak fluent steel”