BISPLATE® 70

BISPLATE® 70 is a low carbon, low alloy, high strength structural steel. This grade can be welded with minimal preheat and has excellent low temperature fracture toughness suitable for structural applications.

APPLICATIONS

The combination of BISPLATE® 70 mechanical properties and ease of fabrication offers economical advantages in many structural applications. Some examples of applications for this grade include:

- Transport equipment *(Trays/Low loaders/Outriggers)*
- Storage tanks *(Water/Oil/Gas)*
- High-rise buildings *(Columns/Transfer beams)*
- Lifting equipment *(Mobile/Overhead cranes)*
- Mining equipment *(Dump truck trays/Structural applications)*
- Longwall mining supports

FABRICATION

BISPLATE® 70 exhibits excellent cold formability and low temperature fracture toughness.

BISPLATE® 70 has been designed such that a low hardness level is produced in the heat affected zone (HAZ). As a result, this steel has a low susceptibility to HAZ cracking.

For further details on fabrication please refer to Bisalloy's technical literature.

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MECHANICAL PROPERTIES

PROPERTIES	SPECIFICATION	TYPICAL
0.2% Proof Stress	600 MPa (Min)	670 MPa
Tensile Strength	690 - 830 MPa	760 MPa
Elongation in 50mm G.L.	20% (Min)	28%
Charpy Impact (Longitudinal) -20˚C (10mm x 10mm)	75J (Min)*	180J
Hardness		230HB

*Dependant on plate thickness

CHEMICAL COMPOSITION

THICKNESS (mm)		C	P	Mn	Si	S	Cr	Mo	B	CE(IIW)*	CET*
5 - <16	Maximum	0.18	0.025	1.5	0.25	0.008	0.25	0.25	0.002	0.40	0.29
≥16 - 80	Maximum	0.20	0.025	1.5	0.25	0.008	0.30	0.25	0.002	0.50	0.35
>80 - 100	Maximum	0.18	0.025	1.5	0.25	0.008	1.20	0.25	0.002	0.58	0.34

*Typical Average