

Cold Rolled Ultra High-Tensile Strength Steel Sheet (1300, 1500, 1700 MPa-grade)

Effect

- Weight Reduction of Bumpers
- Strengthening and Weight Reduction of Body Framework Components

Progress

1. Under Development 2. Development Completed 3. Commercialized

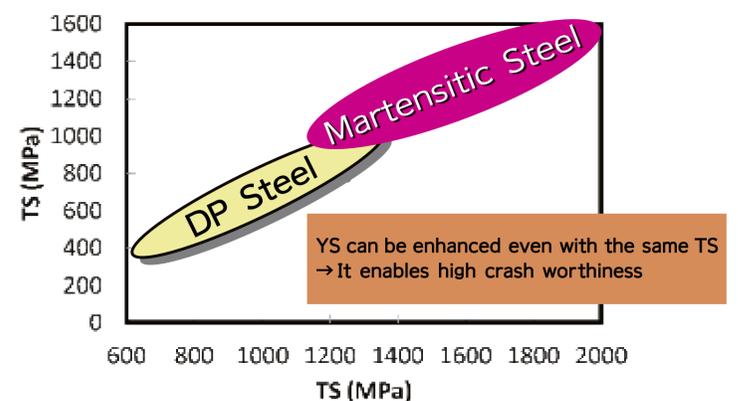
Points

High strength has been realized by utilizing the WQ system.

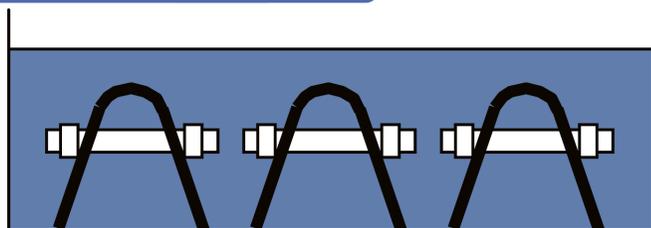
Properties of MS Steel

Specification	YS (MPa)	TS (MPa)	EL (%)	Progress
MS1300	1160	1370	6	Commercialized
MS1500	1280	1570	6	Commercialized
MS1700	1450	1720	5	Under Development

Thickness : 1.2mm



Delayed Fracture Property



Cracks are confirmed by soaking in hydrochloric acid, using test piece (TP) with cutting edge.

Specification	Applied Stress
	0.9TS
MS1300	○○○
MS1500	○○○

○ : No crack / × : Cracked

Thickness : 1.2mm

Evaluation Condition :

Bending R=10 mm

0.1 N Hydrochloric Acid × 200 hrs

Welding Condition

Electrode: Tip diameter 6Φ -DR type

Applied Pressure: 4.1 kN

Weld Time: 10 cycles

Roll Form Formability



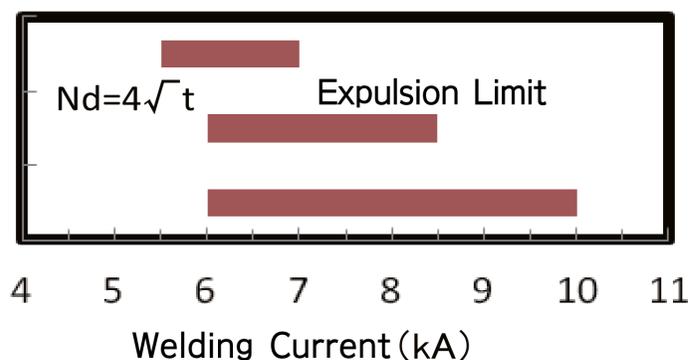
It can be bend to 1.5 R.
(MS1300, MS1500, thickness: 1.2 mm)

Spot Weldability

DP980MPa

1300MPa

1500MPa



The range of the proper welding current is wide (thickness: 1.2 mm)