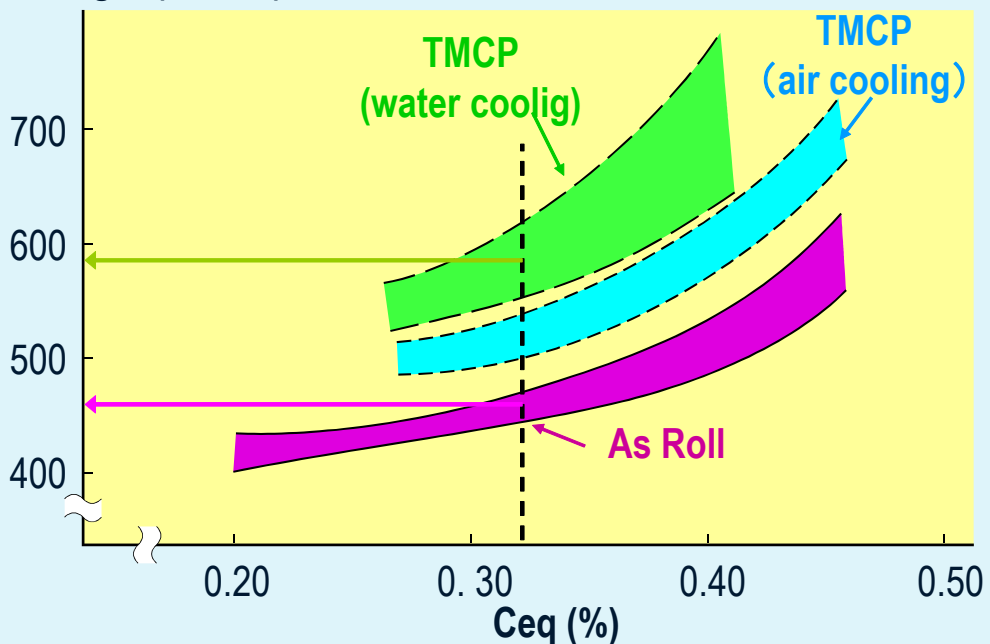


## 04. Thermo-Mechanical Controlled Process / TMCP steel

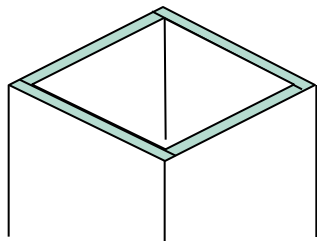
TMCP steel has advantages in both strength and weldability. By adopting TMCP for large and thick members, their sizes can be minimized so the fabrication cost.

■ Maintaining Low rate of  $C_{eq}$  & PCM, TMCP Steel achieves high yield strength without losing weldability.

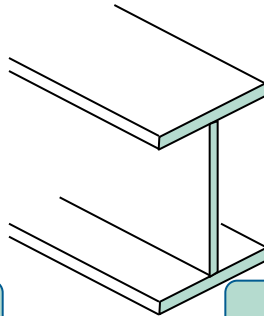
Tensile Strength (N/mm<sup>2</sup>)



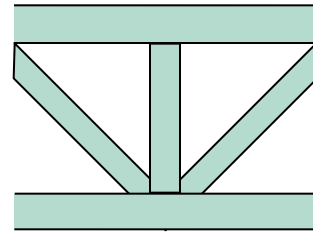
## Applicable Sector



Column



Beam



Truss

Etc.

## Feature

As for TMCP, Constant Yield Strength is specified throughout the thickness range.

Designation	Thickness (mm)	Yield Strength (N/mm <sup>2</sup> )	Tensile Strength (N/mm <sup>2</sup> )	Yield Ratio (%)	Impact Energy (J)	Weldability Ceq (%)
SM490B	$6 \leq t < 12$	$325 \leq$	490~610	—  $\leq 80$	[0°C] 27 $\leq$	(t $\leq$ 40) < 0.44 (40 < t) < 0.46
	$12 \leq t < 40$	325~445				
	$40 \leq t \leq 100$	295~415				
TMCP325B	$40 \leq t \leq 100$	325 ~ 445	490~610	$\leq 80$	[0°C] 27 $\leq$	(t $\leq$ 50) < 0.38 (50 < t) < 0.40
TMCP355B	$40 \leq t \leq 100$	355~475	520~640	$\leq 80$	[0°C] 27 $\leq$	(t $\leq$ 50) < 0.40 (50 < t) < 0.42
TMCP385B	$19 \leq t \leq 100$	385~505	550~670	$\leq 80$	[0°C] 70 $\leq$	(t $\leq$ 50) < 0.40 (50 < t) < 0.42

## Track Record

Adopted in various applications

## Cost

To get information, please ask the contact shown below.

### Contact

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