

Mold Steel for Plastic with Corrosion Resistance and Mirror finish-ability

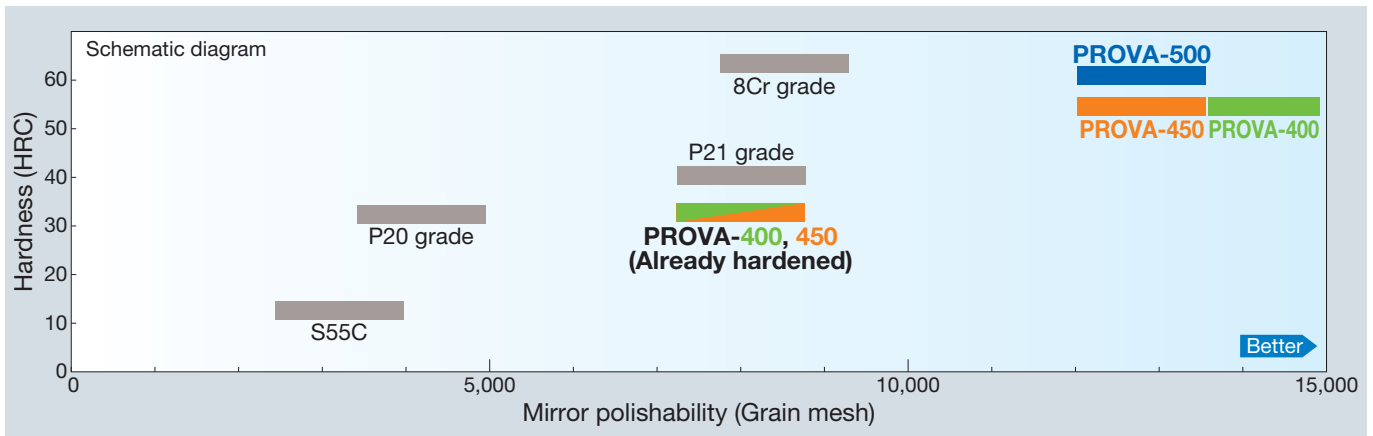
FM ALLOY[®] PROVA Series

The PROVA series are high quality stainless steels that are the best for molds on plastic molding.

- Excellent mirror finish-ability.
- Good machinability.
- Superior corrosion resistance.
- Good wear resistance.
- Small deformation by heat treatment.
- Materials can be provided as already hardened(32HRC).



Polishing Property



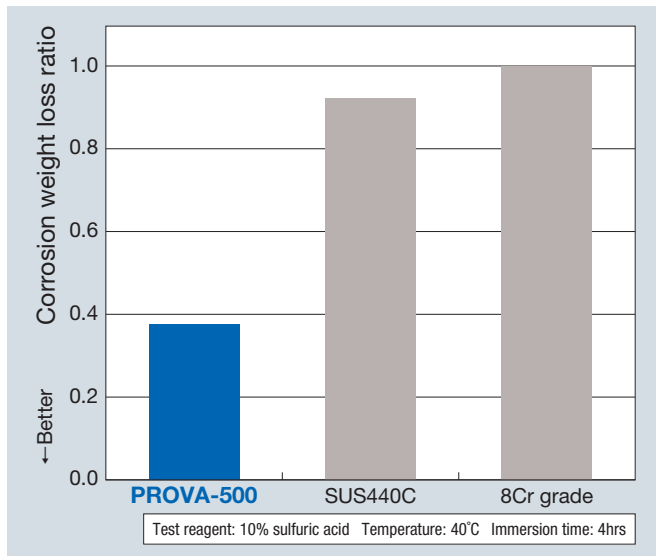
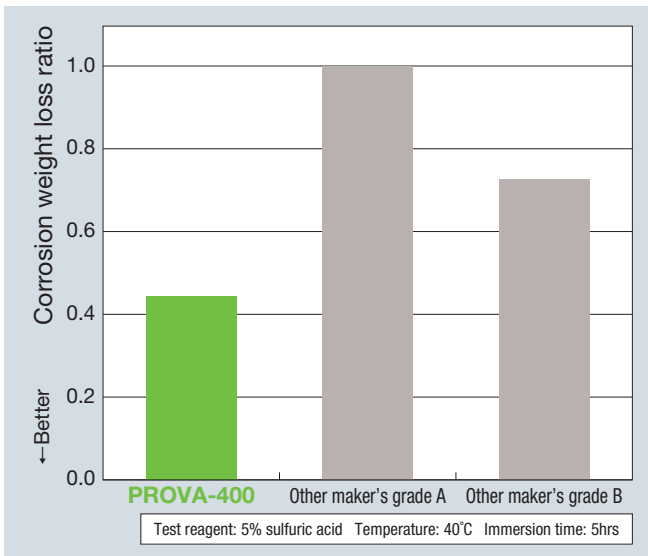
Steel Grade

Grade	Mirror finish-ability	Corrosion resistance	Wear resistance	Cost
PROVA-400	◎	○	○	○
PROVA-450	○	○	○	◎
PROVA-500	○	○	◎	△

Applications

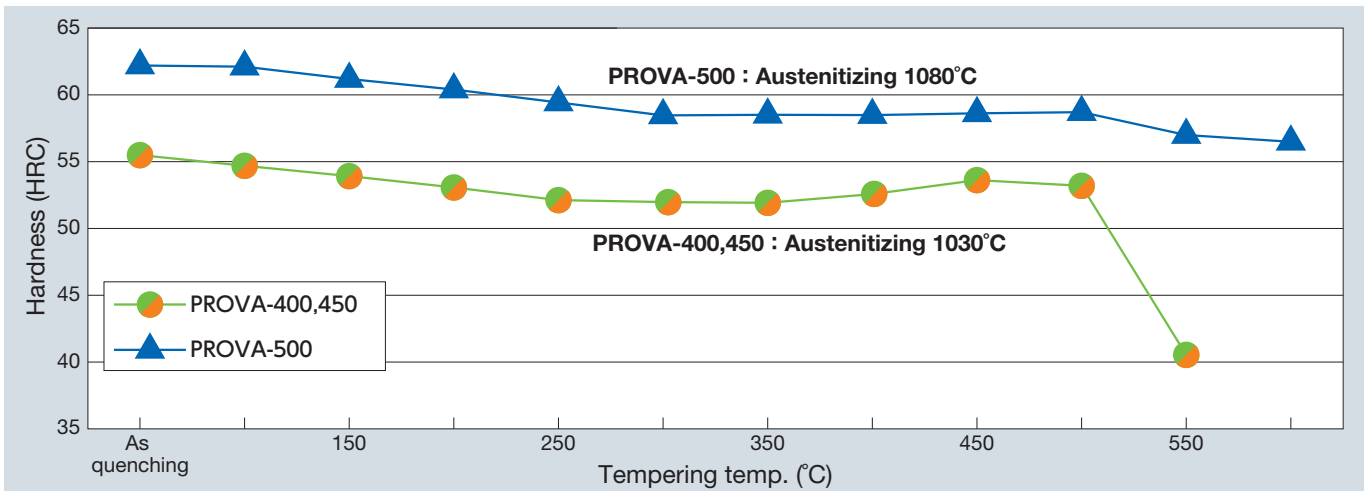
- **Corrosion Resistance**Mold for plastic with fire-retarding material or PVC which are strongly corrosive
- **Wear Resistance**Mold for thermo-setting resin or plastic with glass fiber
- **Mirror Finish-ability**Mold for transparent plastics which are used for optical or medical devices
- **Rigidity**Mold for high-pressure plastic injection (PROVA-500)

Corrosion Resistance



Heat Treatment Condition

Grade	Hardening		Tempering		Demand properties
	Pre-heat (°C)	Austenitizing (°C)	Temperature (°C)	Hardness (HRC)	
PROVA-400	600~850	1000~1050	200~400	51~53	Corrosion resistance / Low age-deformation
			490~510	51~53	Avoid breaking at electric discharging
PROVA-450	600~850	1000~1050	200~400	51~53	Corrosion resistance / Low age-deformation
			490~510	51~53	Avoid breaking at electric discharging
PROVA-500	820~860	1070~1120	150~200	60UP	Corrosion resistance / Low age-deformation
			500~550	58UP	Avoid breaking at electric discharging



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