



# SB Specialty Metals LLC

Your *First Choice* for Specialty Metals

## PSB22 ESR - Premium Tool Steel

**Electro Slag Remelt (ESR) refines tool steels.**

Conventional production



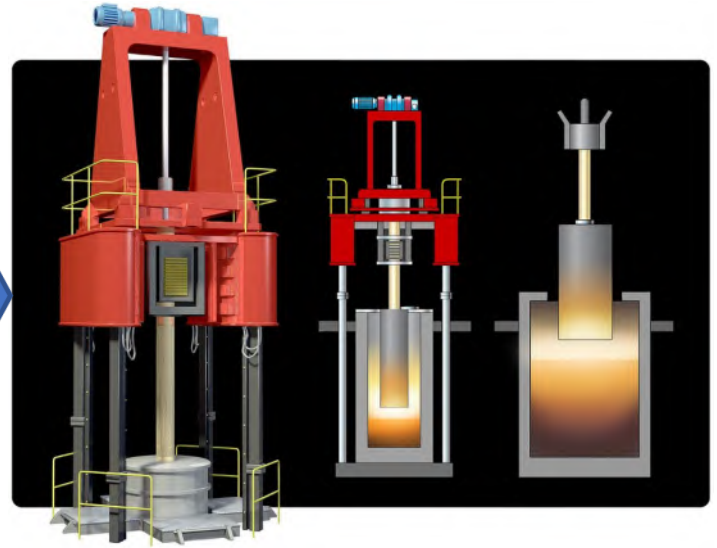
Remelting process removes sulfides and inclusions.



Resulting in high quality ingots

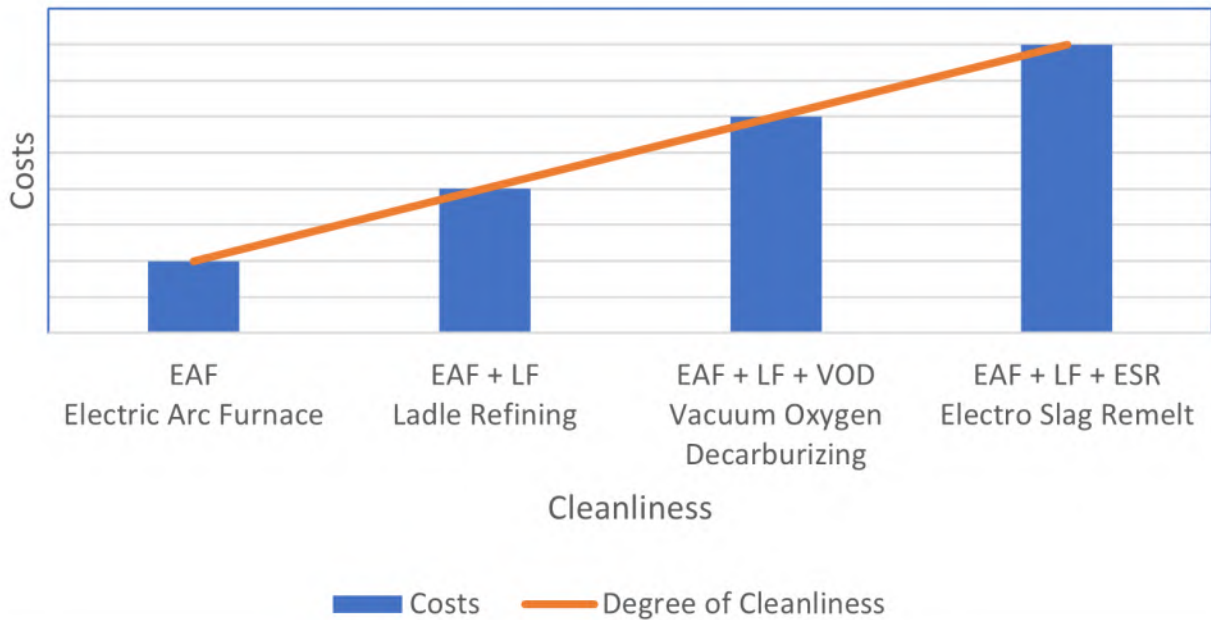


Ladle refining during conventional steel making process



Electro Slag Remelting process

## Cleaner Tool Steel results in better properties





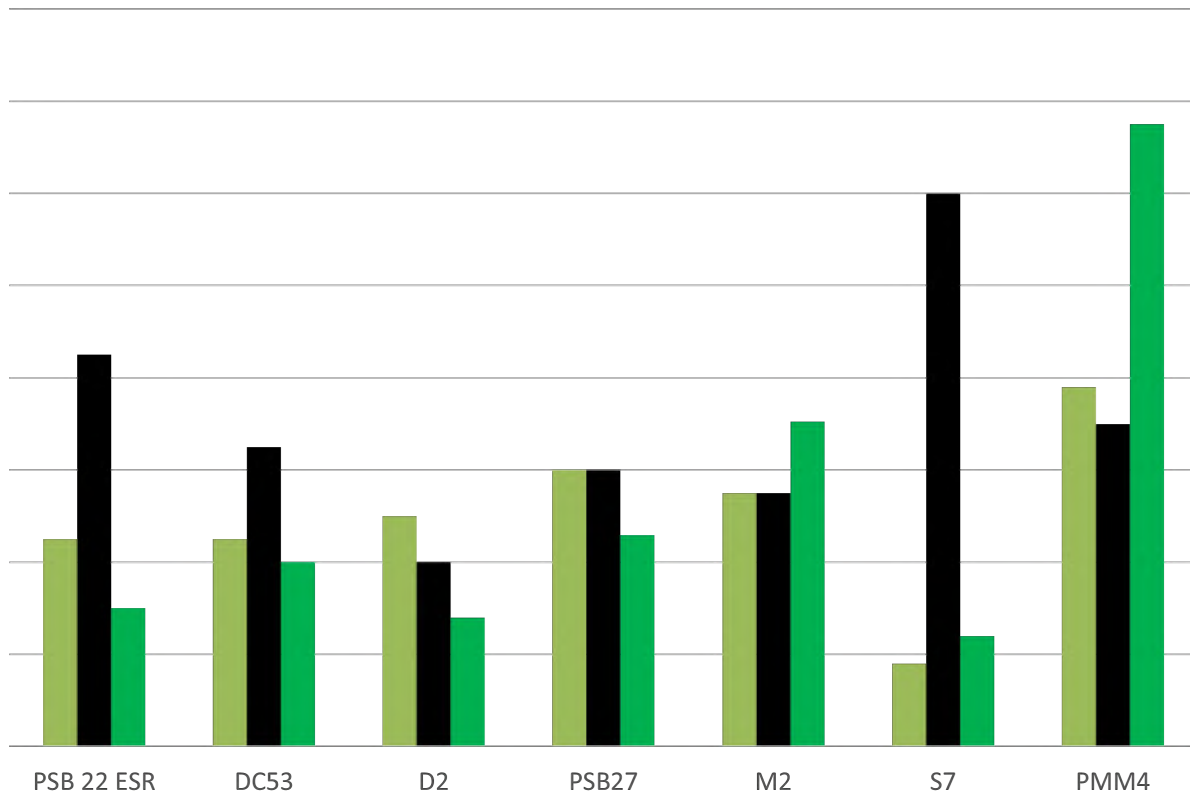
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## PSB22 ESR - Premium Tool Steel

Total Tooling Cost .....Find your balance

■ Wear Resistance ■ Toughness ■ Cost



PSB22 ESR should be considered for the following applications.

Application to consider PSB22 ESR	Replaces	Reason to Switch
General purpose and precision dies.	DC53	Upgrade to ESR, more availability, lower cost.
General purpose and precision dies	D2	Higher tempering °F allows more coating. Upgrade to ESR.
Punches and dies.	DC53	Upgrade to ESR, more availability, lower cost.
Thread rolling and header tooling, form roll knurls and knurling tool holders, rolling dies, extrusion dies, automotive stamping dies.	D2	Higher tempering temperature creates a good substrate ideal for various coatings.
	M2	Lower cost, with similar wear resistance.
	PMM4	Much lower cost with higher toughness.
Tire Shredders and shredding equipment.	D2	Longer tooling life
Thread and Form rolls.	D2	Higher toughness, higher tempering temp, ESR quality.
Slitter knives	D2	Higher toughness, higher tempering temp, EST quality.

Flats:	1" thru 5.5" thick	Hardness Range:	60-64
Rounds:	0.75" thru 12" Diameter	Machinability:	Similar to D2