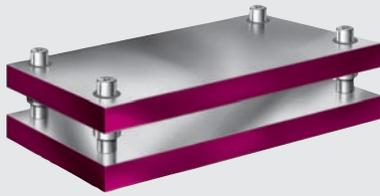


Aluminum Die Sets, Plates, Ram and Mold Plates

Advantages of Aluminum:

- One-third the weight of steel
- Faster and easier setup
- Less wear and tear on the machine (clutch, brake, ram, ...)
- Easy machinability means 20-35% increased feed rates
- Uses existing conventional cuttings tools
- Draws heat away from tooling, then dissipates heat quickly
- Rust free, least susceptible to elements
- Impervious to typical (water soluble) die lubes
- Non-magnetic - good environment for in-die sensing
- Stress relieved in the process - a stable material before/after machining
- Easily recyclable

Note: It is recommended to finish heavy (point pressures) machining before grinding for best results. We do not recommend using steel and aluminum plates in a die set combination.



Four Post - Type 4P



Back Post - Type 2B



Center Post - Type 2C

Comparative Technical Data	Physical & Mechanical Properties	Tensile Strength (psi)	Yield Strength (psi)	Density (lb/inch ³)	Thermal Conductivity*	Thermal Expansion**	Modulus of Elasticity***	Typical Hardness (Rc equivalent)
Hot Rolled Steel	1020	64,000	50,000	.283	20.0	6.3	30	135B (12Rc)
Aircraft Aluminum	6013	58,000	54,000	.098	95	13.0	10.1	120B (11Rc)
Aircraft Aluminum	6061	46,000	42,000	.098	96	13.1	10.0	95B (8Rc)
Aircraft Aluminum	7075	75,000	73,000	.101	75	13.1	10.4	150B (14Rc)
Aircraft Aluminum	QC7	79,000	64,000	.102	91	12.8	10.3	167B (17Rc)
Alloy Steel	4140	102,000	90,000	.282	24.7	6.2	30	220B (21Rc)

* (btu/ft/hr/ft²/°F)

** average coefficient (x 10⁻⁶/in./°F)

*** (x 10⁶ lbs./in.²)