ABS

ABS provides good impact resistance and CNC machinability.

Mechanical properties

Ultimate tensile strength	27.6 - 55.2 MPa
Yield strength	18.5 - 51 MPa
Young's modulus (modulus of elasticity)	1.1 - 2.9 GPa
Elongation at break	10 - 50 %
Hardness	5.6 - 15.3 HV

Physical properties

UV resistance	Poor

Thermal properties

Maximum service temperature	61.9 - 76.9 °C
Thermal expansion coefficent	84.6 - 234 10^-6/ºC
Thermal conductivity	0.188 - 0.335 W/(m·°C)

Electrical properties

ESD Safety	No

Common applications

Automotive applications	
Instrument panels	
Door liners and handles	
Pillar trim	

ABS CNC Machining Applications & Parts

Known for its high impact strength, good machinability, and ease of post-processing, ABS is a popular thermoplastic for functional prototyping and end-use parts that require durability and a fine finish.

Typical Parts We Machine from ABS:

- **Enclosures & Housings:** Electronic Cases, Prototype Covers, Consumer Product Housings
- **Functional Prototypes:** Concept Models, Assembly Fit-Checks, Ergonomics Testing Parts
- **Automotive Interiors:** Dashboard Components, Trim Pieces, Button Modules

Our Machining Advantage:

We expertly machine ABS to avoid stress whitening, achieving smooth surfaces that are ready for painting, plating, or gluing immediately after machining.

Get an Instant Quote your custom ABS parts today.