

Team Member 1

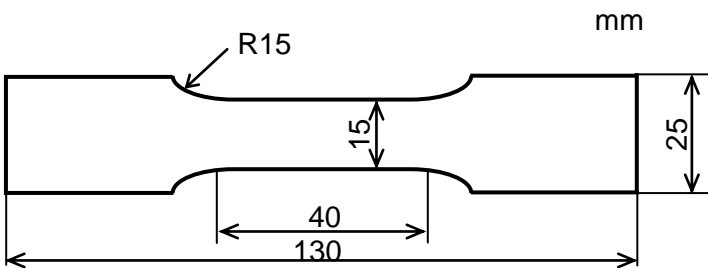


Fig.1 Schematic diagram of the test specimen

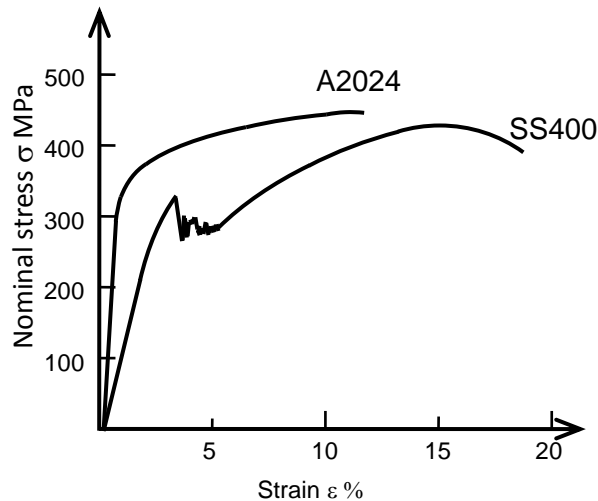


Fig.2 Stress-Strain diagram of mild steel SS400 and aluminum alloy A2024.

	Density kg/m ³	Tensile strength MPa
SS400	7858	400
A2024	2700	430

Table 1 Mechanical properties of SS400 and A2024.
(A2024 is called “super duralumin”. It is used for the main material of airplanes.)

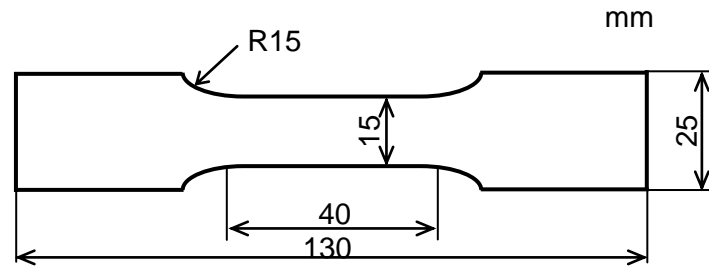


Fig.1 Schematic diagram of the test specimen

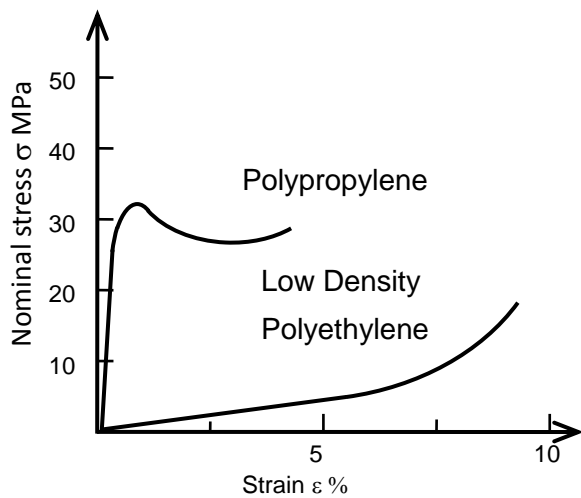


Fig.2 Stress-Strain diagram of polymers.

	Density kg/m ³	Tensile strength MPa
Polypropylene	900	31.0
Low Density Polyethylene	910	8.3

Table 1. Mechanical properties of Polypropylene and Low Density Polyethylene.

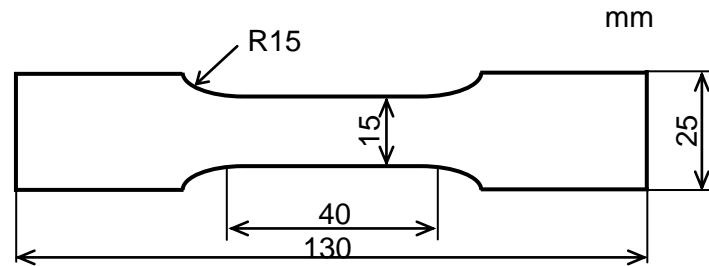


Fig.1 Schematic diagram of the test specimen

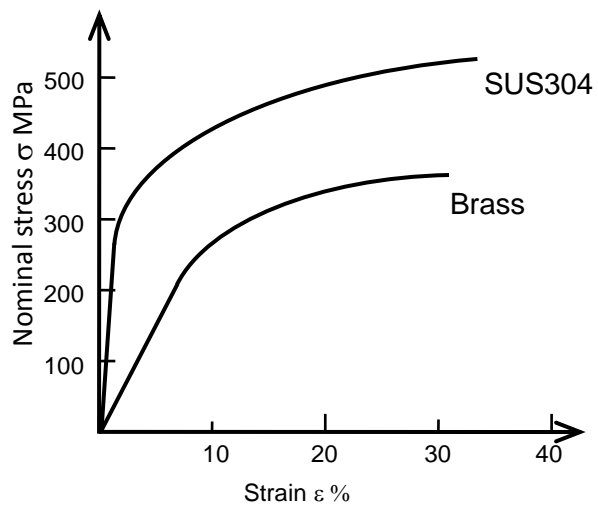


Fig.2 Stress-Strain diagram of Stainless steel SUS304 and Brass (70 Cu - 30 Zn).

	Density kg/m ³	Tensile strength MPa
Aluminum oxide (Alumina)	3600	275
Glass-ceramic (Pyroceram)	2560	247

Table 1. Mechanical property of Aluminum oxide and Glass.

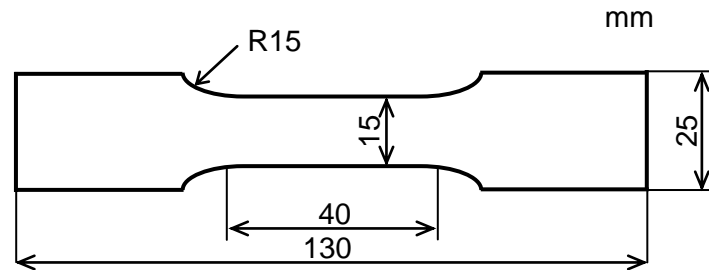


Fig.1 Schematic diagram of the test specimen

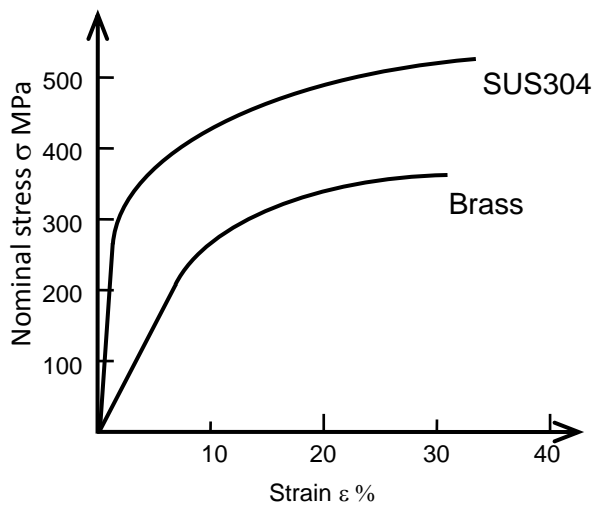


Fig.2 Stress-Strain diagram of Stainless steel SUS304 and Brass (70 Cu - 30 Zn).

	Density kg/m ³	Tensile strength MPa
Stainless steel (SUS304)	7930	520
Brass (70 Cu-30 Zn)	8400	300

Table 1. Mechanical properties of Stainless steel and Brass