

FOOD TEXTURE FIXTURES PROBES AND CHUCKS

Catalog Numbers 2830-005, 015, 036, S5410A

Catalog number 2830-005 is a set of cylindrical, flat-end probes for puncture tests. Diameters range from 1.57 mm to 12.7 mm. These 152 mm long probes are made from nickel plated tool steel for a combination of strength and corrosion resistance.

Catalog number 2830-015 is a set of Magness-Taylor probes. The set includes standard 7.9 mm and 11.1 mm diameter probes with hemispherical tips. Each probe has a machined groove 8.8 mm (0.34 in) from the end to indicate penetration depth.

Catalog number 2830-036 is a three-jaw chuck for mounting probes to the load cell. The chuck can hold probe shanks up to 13 mm in diameter. The keyless design simplifies mounting and changing probes.

Catalog number S5410A is a set of ball ended probes, made of stainless steel for corrosion resistance.

PRINCIPLE OF OPERATION

Flat-end puncture probes produce a shear stress in the specimen. The force required to cause shearing as the probe penetrates the specimen relates to texture properties, such as firmness and hardness. Magness-Taylor probes are used to measure texture properties of fruit flesh. Typically, the specimen's skin is removed and the force required to push the probe to a depth of 8.8 mm is recorded as the bio-yield force.

FEATURES AND BENEFITS

- Flat end probes for puncture and penetration tests
- Magness-Taylor probes for fruits and vegetables
- Keyless three-jaw chuck simplifies mounting and changing probes
- Probes are made from nickel plated steel and stainless steel for corrosion resistance
- Spherical and ball probes are available in a variety of diameters



CHUCKS

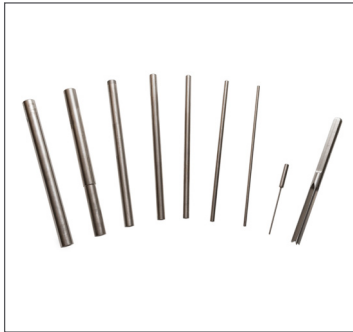
Catalog Number	Mechanical Connection	Maximum Capacity		Effective Length		Weight		Gripping Range		Temperature Range	
		N	lbf	mm	in	g	oz	mm	in	°C	°F
2830-036	6 mm clevis pin (Type 0m)	500	112	94	3.7	340	12	1.5 - 13	0.06 - 0.5	0 to +100	+32 to +212

PROBES

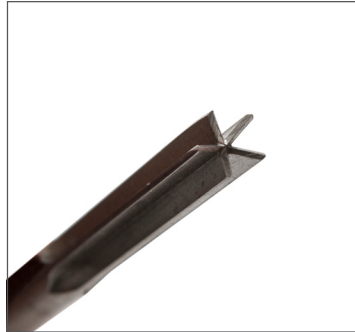
Catalog Number	Overall Length		Diameters		Radius		End Type
	mm	in	mm	in	mm	in	
2830-005	152	6.0	1.59	0.0625	--	--	Flat
			3.18	0.125			
			4.76	0.1875			
			6.35	0.25			
			7.9	0.3125			
			9.5	0.375			
			11.28	0.444			
			12.7	0.5			
2830-015	125	5.0	10	0.4	--	--	Cherry Pitter
			7.9	0.312	4.95	0.19	Round
			11.1	0.437	8.8	0.35	
S5410A	150	6.0	2	0.08	--	--	Ball
			4	0.16			
			6	0.24			
			8	0.31			
			10	0.4			

ACCESSORIES

Catalog Number	Description
S5400A	Drip Tray
S4427A	Support Frame
S5401A	Sample Support Plates



2830-005 Puncture Probes



2830-005 Cherry Pitter



S5410A Ball-End Probes

2830-015 Magness-Taylor Extension
2 Probes