

RAKU® TOOL Boards

	RAKU® TOOL SB-0080	RAKU® TOOL SB-0140	RAKU® TOOL SB-0240	RAKU® TOOL SB-0301	RAKU® TOOL SB-0351
	Styling Boards				
Color	off-white	light green	apricot	apricot	apricot
Density (ISO 1183) g/cm³ ca.	0.08	0.14	0.24	0.30	0.35
Applications	<ul style="list-style-type: none"> > Design studies > CAM program proving models > Substructures for Close Contour pastes > Substructures for clay 	<ul style="list-style-type: none"> > Interior mockup > Design and styling models 	<ul style="list-style-type: none"> > Interior and exterior mockup > Molds for composite prototype parts > Wind tunnel models 	<ul style="list-style-type: none"> > Design and styling models > Laminating molds 	<ul style="list-style-type: none"> > Cutting jigs > Design and styling models
Key Properties	<ul style="list-style-type: none"> > Stable during milling > Temperature resistant up to 100°C > Resistant to organic solvents > Low anti-electro static dust > Low density foam > Homogeneous foam structure 	<ul style="list-style-type: none"> > Fine foam structure with low density > Low anti-electro static dust > Temperature resistant up to 100°C > Large size boards > Stable during milling 	<ul style="list-style-type: none"> > Good chip formation during milling > Large and standard size boards > Very fine foam structure > Very stable during milling 	<ul style="list-style-type: none"> > Fine surface structure > Easy to machine, minimal dust 	<ul style="list-style-type: none"> > Hard surface with low density > High dimensional stability > Very stable during milling
Hardness (ISO 868) Shore D	–	–	–	–	–
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	–	–	60 – 70	65 – 70	60 – 70
Deflection temperature (ISO 75) °C	–	–	60 – 70	60 – 70	65 – 75
Compressive strength (ISO 604) MPa	0.5 – 1.0	1.5 – 2.0	2 – 4	5 – 8	7 – 10
Flexural strength (ISO 178) MPa	–	–	4 – 6	6 – 9	7 – 10
Dimensions mm (Length x Width x Height)	2500 x 1000 x 100 2500 x 1000 x 200 2500 x 1000 x 300 2500 x 1000 x 400 2500 x 1000 x 600 (made to order)	2000 x 1000 x 100 2000 x 1000 x 200 2000 x 1000 x 300 2000 x 1000 x 400	1500 x 500 x 50 1500 x 500 x 100 1500 x 500 x 200 2000 x 1000 x 50 2000 x 1000 x 100 2000 x 1000 x 200	2000 x 1000 x 100 2000 x 1000 x 200	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200
Bonding with RAKU® TOOL		> EP-2305 / EH-2904-1	> EP-2305 / EH-2904-1	> EP-2305 / EH-2904-1	> EP-2305 / EH-2904-1
Mix ratio (pbw)	–	100 : 30	100 : 30	100 : 30	100 : 30
Color		apricot	apricot	apricot	apricot
Pot life 500 ml (min)		25	25	25	25
Minimum curing time (h)		16	16	16	16
Repair with RAKU® TOOL		> EP-2305 / EH-2936-2	> EP-2305 / EH-2936-2	> EP-2305 / EH-2936-2	> EP-2305 / EH-2936-2
Mix ratio (pbw)	–	100 : 50	100 : 50	100 : 50	100 : 50
Color		apricot	apricot	apricot	apricot
Pot life 100 ml (min)		15 – 20	15 – 20	15 – 20	15 – 20
Minimum curing time (min)		90 – 120	90 – 120	90 – 120	90 – 120

SB = Styling Board | MB = Modeling Board | WB = Working Board. Special sizes available on request.

	RAKU® TOOL SB-0470	RAKU® TOOL FP-0590	RAKU® TOOL MB-0600	RAKU® TOOL MB-0670
	Styling Boards	Flame Retardant Panel	Modeling Boards	
Color	apricot	beige	brown	brown
Density (ISO 1183) g/cm³ ca.	0.47	0.6	0.60	0.67
Applications	<ul style="list-style-type: none"> > Architectural models > Interior and exterior mockup > Master models > Molds for composite prototype parts > Thermoforming tools > Water channel models > Wind tunnel models 	<ul style="list-style-type: none"> > Decorative and interior parts which require flame retardance 	<ul style="list-style-type: none"> > General purpose master models > Models and molds > Trimming jigs 	<ul style="list-style-type: none"> > Master models > Master models for composite molds > Molds for composite prototype parts > Architectural models > Wind tunnel models > Water channel models > Thermoforming tools for prototypes
Key Properties	<ul style="list-style-type: none"> > Easy to seal and varnish > Finest foam structure > Good chip formation during milling > Higher mechanical strength > Very stable during milling 	<ul style="list-style-type: none"> > European fire class certification, Class C-s2, d0, EN 13501-1 > Flame retardant > Fine surface structure > Good milling characteristics > Low linear coefficient of thermal expansion 	<ul style="list-style-type: none"> > Fine surface structure > Easy to shape and machine > Easy to seal and varnish > Wide range of thicknesses 	<ul style="list-style-type: none"> > Fine surface structure > Excellent milling characteristics > Easy to seal and varnish > Good temperature resistance > Standard modeling board > Wide range of thicknesses
Hardness (ISO 868) Shore D	–	50 – 55	50 – 55	60 – 65
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	70 – 75	35 – 40	50 – 55	50 – 55
Deflection temperature (ISO 75) °C	75 – 80	70 – 75	70 – 75	75 – 80
Compressive strength (ISO 604) MPa	10 – 15	20 – 25	15 – 20	15 – 20
Flexural strength (ISO 178) MPa	10 – 15	20 – 25	15 – 20	20 – 25
Dimensions mm (Length x Width x Height)	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 50 Further dimensions on request.	1500 x 500 x 25 1500 x 500 x 30 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 30 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200
Bonding with RAKU® TOOL	> EP-2305 / EH-2904-1	> PP-3359 / PH-3905	> EP-2306 / EH-2904-1	> EP-2306 / EH-2904-1
Mix ratio (pbw)	100 : 30	100 : 30	100 : 30	100 : 30
Color	apricot	beige	brown	brown
Pot life 500 ml (min)	25	5 – 8	35	35
Minimum curing time (h)	16	4	16	16
Repair with RAKU® TOOL	> EP-2305 / EH-2936-2	Repair with adhesive bonded inserts	> EP-2306 / EH-2936-2	> EP-2306 / EH-2936-2
Mix ratio (pbw)	100 : 50		100 : 50	100 : 50
Color	apricot		brown	brown
Pot life 100 ml (min)	15 – 20		15 – 20	15 – 20
Minimum curing time (min)	90 – 120		90 – 120	90 – 120

SB = Styling Board | MB = Modeling Board | WB = Working Board.

RAKU® TOOL Boards

	RAKU® TOOL MB-0720	RAKU® TOOL WB-0801	RAKU® TOOL WB-0691	RAKU® TOOL WB-0700	RAKU® TOOL WB-0890
	Modeling Boards	Working Boards			
Color	brown	gray	blue	light green	dark blue
Density (ISO 1183) g/cm³ ca.	0.72	0.80	0.69	0.70	0.89
Applications	<ul style="list-style-type: none"> > Data control models > Master models for tires > Thermoforming tools for prototypes > Molds for composite prototype parts > Architectural models > Assembly jigs for plastic parts > Checking fixtures for plastic parts 	<ul style="list-style-type: none"> > Foundry models for prototypes > Jigs and fixtures for plastic parts > Thermoforming tools 	<ul style="list-style-type: none"> > Lay-up tools for low temperature prepregs > Thermoforming tools 	<ul style="list-style-type: none"> > Lay-up tools for prepregs > Thermoforming tools 	<ul style="list-style-type: none"> > Lay-up tools for low temperature prepregs > Thermoforming tools
Key Properties	<ul style="list-style-type: none"> > Very fine surface structure > Excellent milling characteristics > High edge strength > Wide range of thicknesses > Good dimensional stability > Good temperature resistance 	<ul style="list-style-type: none"> > Good solvent resistance > High heat deflection temperature with low density > High mechanical strength with low density > Low linear coefficient of thermal expansion 	<ul style="list-style-type: none"> > Temperature resistant up to 110°C > Low linear coefficient of thermal expansion > Low odor during milling > Stable during milling > Fine surface structure 	<ul style="list-style-type: none"> > Temperature resistant up to 130°C > Dimensionally stable after post-cure > Low linear coefficient of thermal expansion > Excellent milling characteristics > Very fine surface 	<ul style="list-style-type: none"> > Very fine surface structure > Good dimensional stability > Temperature resistant up to 110°C > Excellent milling characteristics
Hardness (ISO 868) Shore D	60 – 65	65 – 70	70 – 75	70 – 75	75 – 80
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	50 – 55	45 – 50	35 – 45	35 – 45	35 – 45
Deflection temperature (ISO 75) °C	75 – 80	85 – 90	100 – 110	130 – 140	100 – 110
Compressive strength (ISO 604) MPa	20 – 25	40 – 45	50 – 60	50 – 55	60 – 70
Flexural strength (ISO 178) MPa	25 – 30	35 – 40	25 – 35	30 – 40	40 – 50
Dimensions mm (Length x Width x Height)	1500 x 500 x 25 1500 x 500 x 30 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 25 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 (made to order) 1500 x 500 x 200 (made to order)	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150 1500 x 500 x 200	1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100 1500 x 500 x 150
Bonding with RAKU® TOOL	> EP-2306 / EH-2904-1	> EP-2306 / EH-2904-1	> EP-2303 / EH-2934-1	> EP-2304 / EH-2934-1	> EP-2303 / EH-2934-1
Mix ratio (pbw)	100 : 30	100 : 30	100 : 20	100 : 20	100 : 20
Color	brown	brown	blue	light green	blue
Pot life 500 ml (min)	35	35	50 – 60	50 – 60	50 – 60
Minimum curing time (h)	16	16	16	16	16
Repair with RAKU® TOOL	> EP-2306 / EH-2936-2	> EP-2306 / EH-2936-2	> EP-2303 / EH-2936-2	> EP-2304 / EH-2936-2	> EP-2303 / EH-2936-2
Mix ratio (pbw)	100 : 50	100 : 50	100 : 50	100 : 50	100 : 50
Color	brown	brown	blue	light green	blue
Pot life 100 ml (min)	15 – 20	15 – 20	15 – 20	15 – 20	15 – 20
Minimum curing time (min)	90 – 120	90 – 120	90 – 120	90 – 120	90 – 120

SB = Styling Board | MB = Modeling Board | WB = Working Board. * Different mix ratios for special mixtures see technical data sheet.

	RAKU® TOOL WB-1000	RAKU® TOOL WB-1222	RAKU® TOOL WB-1250	RAKU® TOOL WB-1258				
Working Boards								
Color	beige, also available in gray (WB-1001)	green	light green	orange				
Density (ISO 1183) g/cm³ ca.	1.00	1.22	1.25	1.20				
Applications	> Architectural models > Checking fixtures > Foundry models > Thermoforming tools	> Checking fixtures for metal parts > Foundry pattern plates > Hammer tools	> Foundry core boxes > Foundry models > Foundry pattern plates	> Pattern plates > Core boxes				
Key Properties	> Easy to mill > Low linear coefficient of thermal expansion > Very fine surface structure	> Good abrasion resistance > Low wear of milling tools > Most proven working board on the market > Resistant to amine > Resistant to dry ice cleaning	> Easy to mill > Low wear of milling tools > Resistant to dry ice cleaning > Excellent abrasion resistance > Excellent amine resistance	> Excellent abrasion resistance > High impact resistance > High edge strength > Excellent milling characteristics > Excellent resistance to chemicals				
Hardness (ISO 868) Shore D	75 – 80	75 – 85	77 – 83	80 – 85				
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	50 – 60	80 – 85	70 – 75	70 – 75				
Deflection temperature (ISO 75) °C	70 – 80	80 – 90	80 – 85	70 – 75 (Tg)				
Compressive strength (ISO 604) MPa	45 – 50	60 – 70	70 – 80	90 – 100				
Flexural strength (ISO 178) MPa	45 – 50	70 – 80	90 – 100	100 – 110				
Dimensions mm (Length x Width x Height)	1500 x 500 x 25 1500 x 500 x 50 1500 x 500 x 75 1500 x 500 x 100	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100				
Bonding with RAKU® TOOL	> PP-3310 / PH-3905	> EL-2210 / EH-2910-1*	> PP-3311 / PH-3905	> EL-2210 / EH-2910-1*	> PP-3350 / PH-3905	> EL-2210 / EH-2910-1*	> PP-3358 / PH-3905	> EL-2210 / EH-2910-1*
Mix ratio (pbw)	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60
Color	beige	clear	green	clear	light green	clear	orange	clear
Pot life 500 ml (min)	5 – 8	60	5 – 8	60	5 – 8	60	5 – 8	60
Minimum curing time (h)	4	16	4	16	4	16	4	16
Repair with RAKU® TOOL	Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts	
Mix ratio (pbw)								
Color								
Pot life 100 ml (min)								
Minimum curing time (min)								
SB = Styling Board MB = Modeling Board WB = Working Board. * Different mix ratios for special mixtures see technical data sheet.								

3-3-001/25EN. 2/3. Errors excepted. Subject to change.

RAMPF Tooling Solutions GmbH & Co. KG

Robert-Bosch-Straße 8-10 | 72661 Grafenberg | Germany
T +49.7123.9342-1600 | F +49.7123.9342-1666
E tooling.solutions@rampf-group.com

	RAKU® TOOL WB-1404	RAKU® TOOL WB-1460	RAKU® TOOL WB-1600	RAKU® TOOL WB-1700			
	Working Boards						
Color	olive	light green	ivory	dark gray			
Density (ISO 1183) g/cm³ ca.	1.40	1.46	1.60	1.70			
Applications	<ul style="list-style-type: none"> > Checking fixtures for metal parts > Foundry models > Foundry pattern plates and core boxes > Hammer tools > Models and molds for composite applications > Models and molds for polyester applications > Molds for low pressure RIM > Thermoforming tools 	<ul style="list-style-type: none"> > Foundry models > Foundry pattern plates 	<ul style="list-style-type: none"> > Jigs and checking fixtures for metal parts > Metal sheet forming tools > Thermoforming tools 	<ul style="list-style-type: none"> > Jigs and checking fixtures for metal parts > Metal sheet forming tools > Preform tools for RTM > Prototyping RTM tools > Thermoforming tools 			
Key Properties	<ul style="list-style-type: none"> > Polishable > Good abrasion resistance > Good amine resistance > Good styrene resistance > Low coefficient of thermal expansion > Resistant to dry ice cleaning 	<ul style="list-style-type: none"> > Good abrasion resistance > Made with recycled polyol > Resistant to amine > Resistant to dry ice cleaning 	<ul style="list-style-type: none"> > Good mechanical properties > Low linear coefficient of thermal expansion 	<ul style="list-style-type: none"> > Polishable > Temperature resistant up to 120°C > Low friction resistance > Excellent mechanical properties > Very low linear coefficient of thermal expansion 			
Hardness (ISO 868) Shore D	85 – 90	80 – 85	85 – 90	85 – 90			
Coefficient of thermal expansion (ISO 11359) 10⁻⁶ K⁻¹	50 – 55	65 – 75	45 – 50	45 – 50			
Deflection temperature (ISO 75) °C	75 – 80	75 – 80	75 – 80	120 – 125			
Compressive strength (ISO 604) MPa	85 – 95	70 – 80	90 – 100	125 – 130			
Flexural strength (ISO 178) MPa	80 – 90	70 – 80	55 – 65	80 – 85			
Dimensions mm (Length x Width x Height)	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	1000 x 500 x 30 1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	750 x 500 x 50 750 x 500 x 75 750 x 500 x 100	750 x 500 x 50 750 x 500 x 75 750 x 500 x 100			
Bonding with RAKU® TOOL	> PP-3314 / PH-3905	> EL-2210 / EH-2910-1*	> PP-3311 / PH-3905	> EL-2210 / EH-2910-1*	> PP-3310 / PH-3905	> EL-2210 / EH-2910-1*	> EL-2210 / EH-2910-1*
Mix ratio (pbw)	100 : 50	100 : 60	100 : 50	100 : 60	100 : 50	100 : 60	100 : 60
Color	olive	clear	green	clear	beige	clear	clear
Pot life 500 ml (min)	5 – 8	60	5 – 8	60	5 – 8	60	60
Minimum curing time (h)	4	16	4	16	4	16	16
Repair with RAKU® TOOL	Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts		Repair with adhesive bonded inserts
Mix ratio (pbw)							
Color							
Pot life 100 ml (min)							
Minimum curing time (min)							
SB = Styling Board MB = Modeling Board WB = Working Board. * Different mix ratios for special mixtures see technical data sheet.							

3-3-001/25EN. 2/3. Errors excepted. Subject to change.

RAMPF Tooling Solutions GmbH & Co. KG

Robert-Bosch-Straße 8-10 | 72661 Grafenberg | Germany
T +49.7123.9342-1600 | F +49.7123.9342-1666
E tooling.solutions@rampf-group.com