

Supplied by

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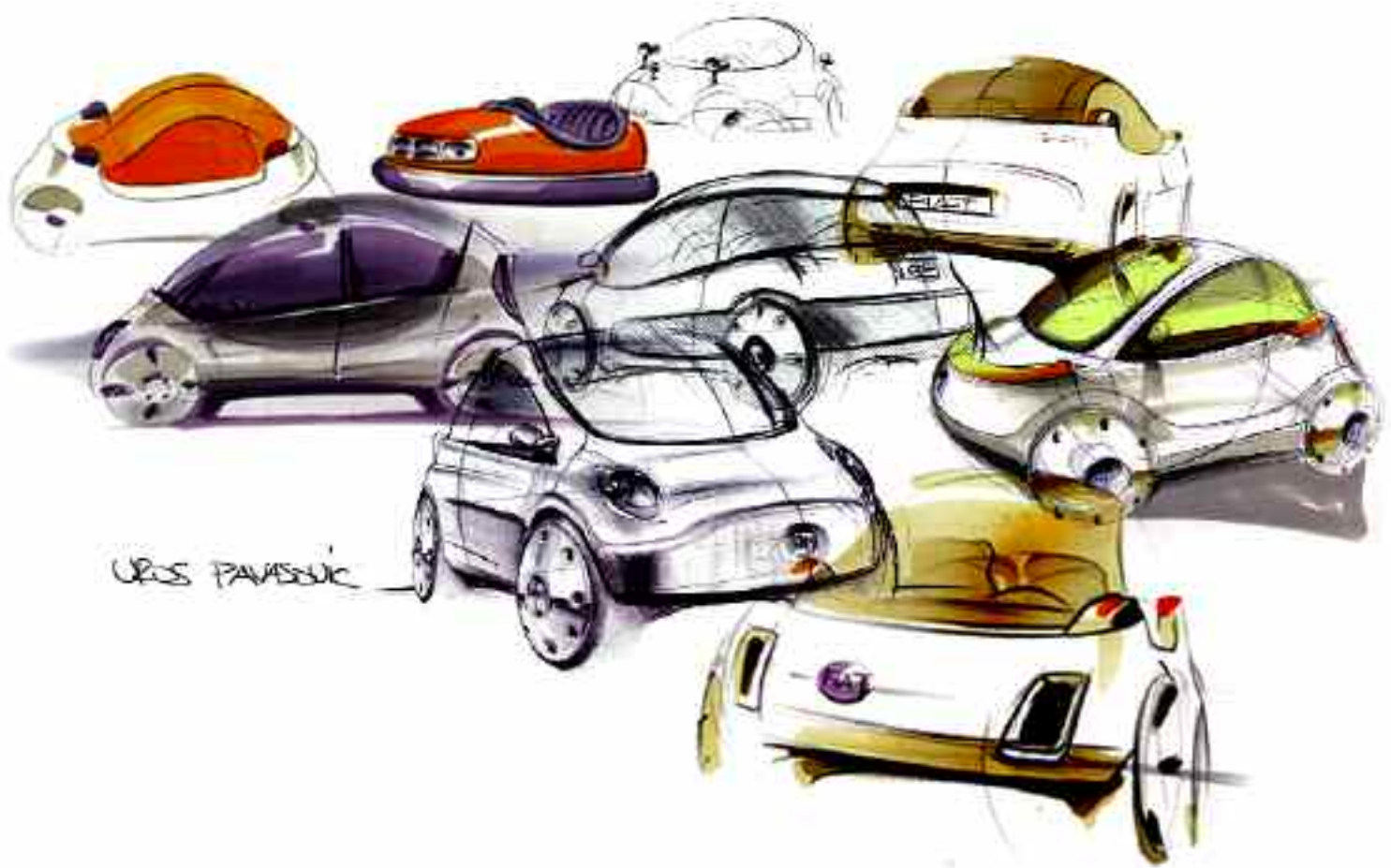
## RAKU-TOOL® Boards

There is a solution for every challenge: RAKU-TOOL



**RAMPF®**  
discover the future

**We find solutions for your applications –**  
Performance proven solutions with RAKU-TOOL®.



**Modeling and Working Boards.** RAKU-TOOL styling (SB), modeling (MB) and working boards (WB) stand for high mechanical properties and continuous quality. The materials are shaped manually or machined easily using the correct tools.



#### **Styling (SB)**

- » Styling & Design Models
- » Program proving

Key Properties:

- » Fine surface structure
- » Easily shaped and machined

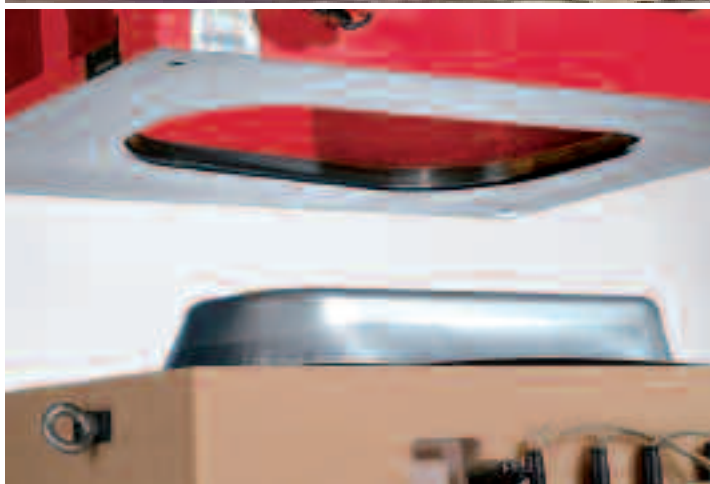


#### **Modeling (MB)**

- » Master Models
- » Cubing Models
- » Patterns

Key Properties:

- » Very fine surface structure
- » Good dimensional stability



#### **Tools (WB)**

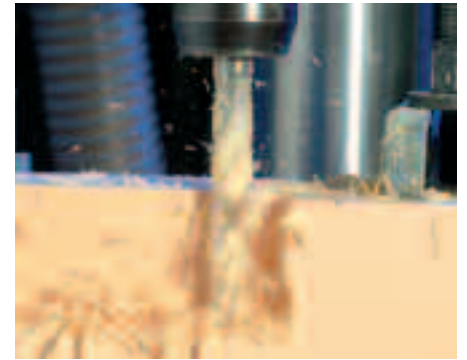
- » Metalforming Tools
- » Foundry Patterns
- » Core Boxes
- » Jigs and Fixtures
- » Prepreg Lay Up Tools

Key Properties:

- » Excellent mechanical properties

# RAKU-TOOL®

## Styling & Modeling Boards



» RAKU-TOOL  
SB-0080

» RAKU-TOOL  
SB-0140

» RAKU-TOOL  
SB-0240

» RAKU-TOOL  
SB-0310

» RAKU-TOOL  
SB-0320

### Design & Styling with RAKU-TOOL

	» RAKU-TOOL SB-0080	» RAKU-TOOL SB-0140	» RAKU-TOOL SB-0240	» RAKU-TOOL SB-0310	» RAKU-TOOL SB-0320
Color	White	Light green	Apricot	Sienna	Apricot
Density (ISO 1183) g/cm <sup>3</sup>	0.08	0.14	0.24	0.31	0.32
Applications	Styling models	Design study Program proving	Styling & design models	Styling & design models	Styling & design models
Key properties	<ul style="list-style-type: none"> <li>» Very light, fine surface structure</li> <li>» Easily shaped and machined</li> <li>» Resistant to organic solvents</li> </ul>	<ul style="list-style-type: none"> <li>» Light weight and smooth surface</li> <li>» Easily shaped, low dust</li> <li>» Resistant to organic solvents</li> </ul>	<ul style="list-style-type: none"> <li>» Good surface structure</li> <li>» Easily shaped and machined</li> <li>» Resistant to organic solvents</li> </ul>	<ul style="list-style-type: none"> <li>» Good surface structure</li> <li>» Easily shaped and machined</li> </ul>	<ul style="list-style-type: none"> <li>» Very good surface structure</li> <li>» Easily shaped and machined</li> </ul>
Hardness (ISO 868) Shore D	–	–	–	–	–
Coefficient of thermal expansion (ISO 11359) 10 <sup>-6</sup> K <sup>-1</sup>	–	–	60 – 70	60 – 65	60 – 65
Deflection temperature (ISO 75) °C	–	–	55 – 65	60 – 70	60 – 70
Compressive strength (ISO 604) MPa	–	1.8 – 2	2 – 4	7 – 8	5 – 7
Flexural strength (ISO 178) MPa	–	–	5 – 6	6 – 8	6 – 8
Dimensions mm (Length x Width x Height)	2500 x 1200 x 100 2500 x 1200 x 200 2500 x 1200 x 400	2000 x 1000 x 100 2000 x 1000 x 200 2000 x 1000 x 400	2000 x 1000 x 100 2000 x 1000 x 200	1500 x 500 x 50 1500 x 500 x 100 1500 x 500 x 200 2000 x 500 x 100	1500 x 500 x 50 1500 x 500 x 100 1500 x 500 x 200 2000 x 500 x 50 2000 x 500 x 100 2000 x 500 x 200

» EP-2305/EH-2904

» EP-2305/EH-2904

» EP-2305/EH-2904

» EP-2305/EH-2904

### Bonding with RAKU-TOOL

	» EP-2305/EH-2904	» EP-2305/EH-2904	» EP-2305/EH-2904	» EP-2305/EH-2904
Mixing ratio (pbw)		100 : 30	100 : 30	100 : 30
Color		Apricot	Apricot	Apricot
Pot life 500 ml (min.)		25	25	25
Minimum curing time (h)		16	16	16

» UP-4300/UH-4900

» UP-4300/UH-4900

» UP-4300/UH-4900

» UP-4300/UH-4900

### Repair with RAKU-TOOL

	» UP-4300/UH-4900	» UP-4300/UH-4900	» UP-4300/UH-4900	» UP-4300/UH-4900
Mixing ratio (pbw)		100 : 1 – 3	100 : 1 – 3	100 : 1 – 3
Color		Light brown	Light brown	Light brown
Pot life (min.)		4 – 6	4 – 6	4 – 6
Minimum curing time (min.)		25 – 30	25 – 30	25 – 30



**Modeling boards** are used for master models, cubing models, presentation models, design and shape studies.

» RAKU-TOOL  
SB-0470

» RAKU-TOOL  
MB-0550

» RAKU-TOOL  
MB-0670

» RAKU-TOOL  
MB-0720

### Modeling with RAKU-TOOL

Apricot	Color	Brown	Brown	Brown
0.47	Density (ISO 1183) g/cm <sup>3</sup>	0.55	0.67	0.72
Styling & master models	Applications	Master models Cubing models Patterns	Master models Cubing models Patterns	Master models Cubing models Patterns
» Very good surface structure » Easily machined	Key properties	» Very fine surface » Easily machined » Low coefficient of thermal expansion » Good dimensional stability	» Very fine surface » Easily machined » Low coefficient of thermal expansion » Good dimensional stability	» Excellent surface structure » Low coefficient of thermal expansion » Good dimensional stability » Good compressive and flexural strength
–	Hardness (ISO 868) Shore D	55 – 60	60 – 65	60 – 65
60 – 65	Coefficient of thermal expansion (ISO 11359) 10 <sup>-6</sup> K <sup>-1</sup>	50 – 55	50 – 55	50 – 55
60 – 70	Deflection temperature (ISO 75) °C	75 – 80	75 – 80	75 – 80
10 – 15	Compressive strength (ISO 604) MPa	15 – 20	20	20 – 25
10 – 15	Flexural strength (ISO 178) MPa	15 – 20	20 – 25	25 – 30
1500 x 500 x 50 1500 x 500 x 100 1500 x 500 x 200	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	1500 x 500 x 25 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 150 1500 x 500 x 200

» EP-2305/EH-2904

» EP-2306/EH-2904

» EP-2306/EH-2904

» EP-2306/EH-2904

### Bonding with RAKU-TOOL

100 : 30	Mixing ratio (pbw)	100 : 30	100 : 30	100 : 30
Apricot	Color	Brown	Brown	Brown
25	Pot life 500 ml (min.)	35	35	35
16	Minimum curing time (h)	16	16	16

» UP-4300/UH-4900

» UP-4310/UH-4900

» UP-4310/UH-4900

» UP-4310/UH-4900

### Repair with RAKU-TOOL

100 : 1 – 3	Mixing ratio (pbw)	100 : 1 – 3	100 : 1 – 3	100 : 1 – 3
Light brown	Color	Brown	Brown	Brown
4 – 6	Pot life (min.)	4 – 6	4 – 6	4 – 6
25 – 30	Minimum curing time (min.)	25 – 30	25 – 30	25 – 30

# RAKU-TOOL®

## Working Boards



» RAKU-TOOL  
WB-0700

» RAKU-TOOL  
WB-1000

» RAKU-TOOL  
WB-1220

» RAKU-TOOL  
WB-1222

### Tool making with RAKU-TOOL

	» RAKU-TOOL WB-0700	» RAKU-TOOL WB-1000	» RAKU-TOOL WB-1220	» RAKU-TOOL WB-1222
Color	Light green	Beige	Red	Green
Density (ISO 1183) g/cm <sup>3</sup>	0.70	1.00	1.22	1.22
Applications	Lay up tools for pre-preg High temperature applications Vacuum forming molds	Tooling jigs Fixtures	Pattern plates Core boxes Tooling jigs	Pattern plates Core boxes Tooling jigs Hammer forms
Key properties	<ul style="list-style-type: none"> <li>» Very fine surface structure</li> <li>» Very easily machined</li> <li>» Good dimensional stability</li> <li>» Temperature resistance up to 135° C</li> </ul>	<ul style="list-style-type: none"> <li>» Very easily machined</li> <li>» Low coefficient of thermal expansion</li> <li>» Good edge strength and abrasion resistance</li> </ul>	<ul style="list-style-type: none"> <li>» Very easily machined</li> <li>» Good temperature resistance</li> <li>» High impact and good edge strength</li> <li>» High abrasion resistance</li> </ul>	<ul style="list-style-type: none"> <li>» Very easily machined</li> <li>» Good temperature resistance</li> <li>» High impact and good edge strength</li> <li>» High abrasion resistance</li> </ul>
Hardness (ISO 868) Shore D	70 – 80	75 – 85	80 – 85	75 – 85
Coefficient of thermal expansion (ISO 11359) 10 <sup>-6</sup> K <sup>-1</sup>	35 – 45	50 – 55	80 – 85	80 – 85
Deflection temperature (ISO 75) °C	135 – 140	70 – 80	75 – 85	80 – 90
Compressive strength (ISO 604) MPa	50 – 55	45 – 50	70 – 80	60 – 70
Flexural strength (ISO 178) MPa	30 – 40	50 – 55	70 – 80	70 – 80
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 50 1500 x 500 x 100	1000 x 500 x 50 1000 x 500 x 100	1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100

» EP-2304/EH-2934

» EL-2210/EH-2910

» EL-2210/EH-2910

» EL-2210/EH-2910

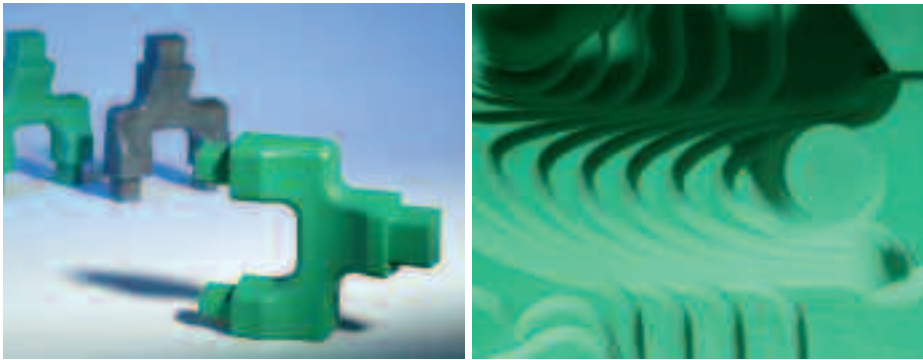
### Bonding with RAKU-TOOL

	» EP-2304/EH-2934	» EL-2210/EH-2910	» EL-2210/EH-2910	» EL-2210/EH-2910
Mixing ratio (pbw)	100 : 20	100 : 60	100 : 60	100 : 60
Color	Green	Transparent	Transparent	Transparent
Pot life 500 ml (min.)	90	60	60	60
Minimum curing time (h)	16	16	16	16

» UP-4320/UH-4920

### Repair with RAKU-TOOL

Mixing ratio (pbw)	100 : 3 – 5			
Color	Green	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts
Pot life (min.)	4 – 6			
Minimum curing time (min.)	25 – 30			



**Working boards** are used for metal forming, hammer forms, foundry patterns, molds, jigs and lay up tools.

» RAKU-TOOL  
WB-1404

» RAKU-TOOL  
WB-1600

» RAKU-TOOL  
WB-1700

**Tool making with RAKU-TOOL**

Color	Olive	Ivory	Dark gray
Density (ISO 1183) g/cm <sup>3</sup>	1.40	1.60	1.70
Applications	Pattern plates and core boxes Machined negatives and positives Models, molds and tools Hammer forms and jigs	Metal forming tools Jigs and fixtures	Metal forming tools Vacuum forming molds jigs Foam molds rapid prototyping molds
Key properties	<ul style="list-style-type: none"> <li>» Dense surface structure</li> <li>» Very easily machined</li> <li>» Good dimensional stability</li> <li>» Good abrasion resistance and impact strength</li> </ul>	<ul style="list-style-type: none"> <li>» Dense surface</li> <li>» Easily machined</li> <li>» Low coefficient of thermal expansion</li> <li>» Very good compressive strength</li> </ul>	<ul style="list-style-type: none"> <li>» Very dense surface structure, can be polished</li> <li>» Easily machined</li> <li>» Good temperature resistance</li> <li>» Excellent compressive strength</li> <li>» High abrasion resistance</li> </ul>
Hardness (ISO 868) Shore D	85 – 90	85 – 90	85 – 90
Coefficient of thermal expansion (ISO 11359) 10 <sup>-6</sup> K <sup>-1</sup>	50 – 55	45 – 50	45 – 50
Deflection temperature (ISO 75) °C	75 – 80	75 – 80	120 – 125
Compressive strength (ISO 604) MPa	85 – 95	90 – 100	125 – 130
Flexural strength (ISO 178) MPa	80 – 90	55 – 65	80 – 85
Dimensions mm (Length x Width x Height)	1000 x 500 x 50 1000 x 500 x 75 1000 x 500 x 100	750 x 500 x 50 750 x 500 x 100	750 x 500 x 50 750 x 500 x 100

» EL-2210/EH-2910

» EL-2210/EH-2910

» EL-2210/EH-2910

**Bonding with RAKU-TOOL**

Mixing ratio (pbw)	100 : 60	100 : 60	100 : 60
Color	Transparent	Transparent	Transparent
Pot life 500 ml (min.)	60	60	60
Minimum curing time (h)	16	16	16

**Repair with RAKU-TOOL**

	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts	Repair with adhesive bonded inserts
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Our recommendations on the use of the material are based on many years of experience and current scientific and practical knowledge. They are, however, provided without any obligation on our part and do not relieve the buyer of the need for suitability tests. They do not constitute a legal relationship, nor are any protected third party rights whatsoever affected thereby. No liability accepted for misprints.

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