

Klepper 1988  
 Six sailboards, ranging from  
 272 cm to 370 cm.  
 Sailing excitement and fun  
 with state-of-the-art shapes  
 in "Epoxy PC".  
 "Epoxy PC" Technology.  
 The new composite con-  
 struction from Klepper has  
 some impressive advan-

tages.  
 Epoxy Resin Laminate com-  
 bines light weight with  
 tremendous stiffness and  
 stability.  
 Polycarbonate has the  
 lowest skin friction of all sail-  
 board skins, and the highest  
 impact resistance of any  
 compound.

The new sandwich con-  
 struction, and the excep-  
 tional shapes of Helmut  
 Wanke, prove their superi-  
 ority on the water.

Klepper 1988. Performance  
 — above all!

# KLEPPER®

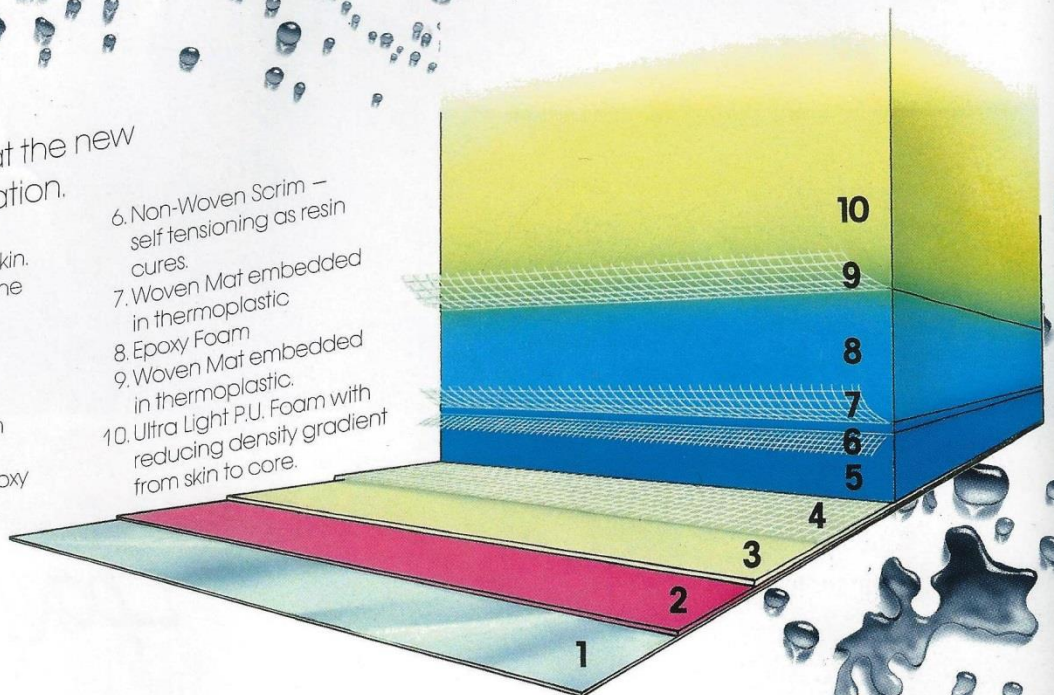
## EPOXY-PC

### EPOXY PC

A detailed look at the new  
 Epoxy PC generation.

1. Pure polycarbonate skin.
2. Graphics printed on the inside of the skin.
3. Bonding Primer — for secure lamination.
4. Non-Woven Scrim — self tensioning as resin cures.
5. Specially blended Epoxy resin-absorbs impact.

6. Non-Woven Scrim — self tensioning as resin cures.
7. Woven Mat embedded in thermoplastic.
8. Epoxy Foam.
9. Woven Mat embedded in thermoplastic.
10. Ultra Light P.U. Foam with reducing density gradient from skin to core.



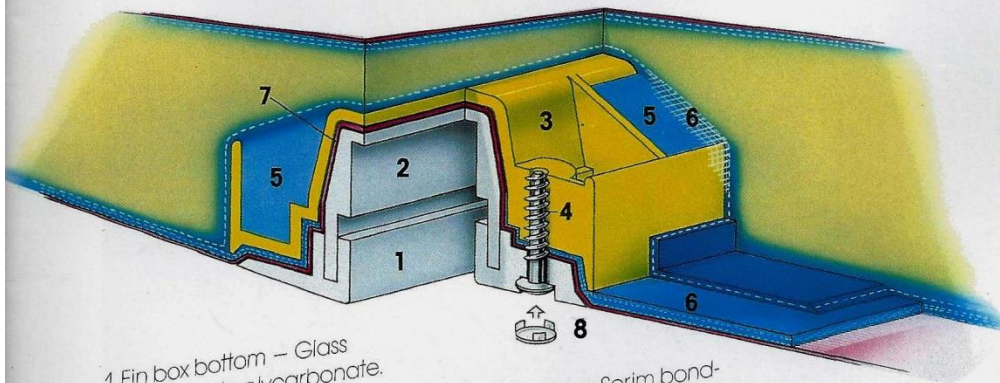


## The Seam Construction

A special epoxy glue and the inside to outside connection create a secure seam, performance proven on the test bench.



1. Impact absorbing material saturated with epoxy glue.
2. Scrim laminated in epoxy glue.
3. Klepper Epoxy PC sandwich construction for the rail sides.



1. Fin box bottom – Glass reinforced polycarbonate.
2. Fin box top – Glass reinforced polycarbonate.
3. Fin box inner casing – Glass reinforced polycarbonate.
4. Six large screws anchor the finbox in the casing.
5. Epoxy resin foam laminate.

6. Non – Woven Scrim bonded into foam core to distribute fin loading over a larger area.
7. Vacuum moulded polycarbonate skin, glued with epoxy.
8. Filler caps for screw openings.

## The Fin Box

For 1988, the Fin Box has been greatly reinforced and is now anchored with screws. The new system is only some 200 grams (7 oz.) heavier but is now equal to the most demanding conditions.



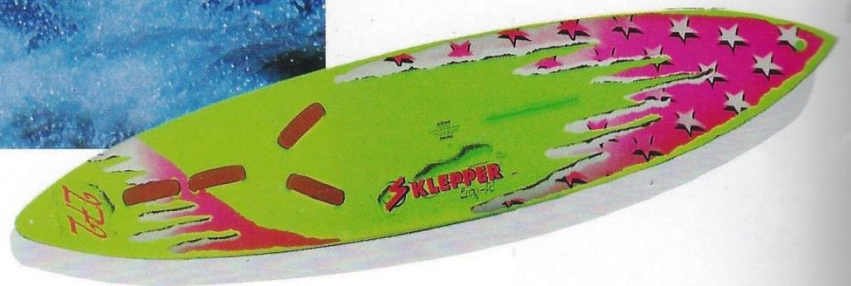
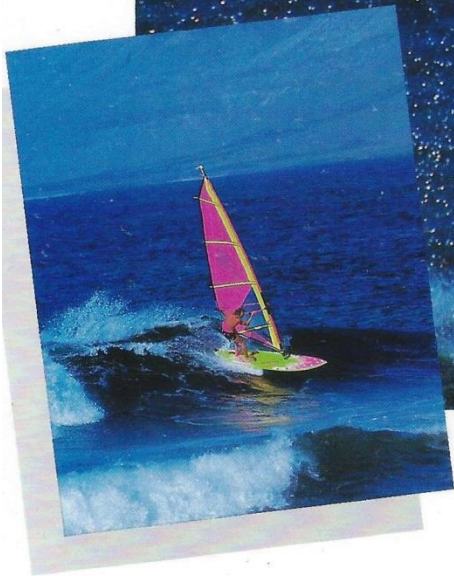
## Klepper Micro-Grinding

Polycarbonate offers the lowest skin friction of any sailboard skin. Yet, as fast as this finish is, it does not promote good attached flow over the planing phase; and rightly so. To prevent the drag induced by the turbulence which results, Klepper "Micro-

Grinds" the underwater area from the planing phase to the tail. This creates a water film on the polycarbonate; water turbulence meets film and dissipates completely. The resulting laminar flow means early planing, less spin out and higher top speed.

**Klepper 272**  
The overwhelming success of 1987. The 272 knows no limits in boardsailing fun, and is very much at home in high waves and winds up to 40 knots. This board will deliver the ultimate performance no matter how demanding the conditions. The 272 planes early for a sinker, due to careful volume distribution. The bottom shape and built in "flexi-tail" delivers high top speed and impressive turns in a much sought after, but rarely found combination. 272 — for the Radical Minority.

Length: 272 cm — 8'10"  
Width: 59 cm — 1'11"  
Volume: app. 90 liters  
Weight\*: app. 7.9 kg — 17 lbs.  
Material: Epoxy PC  
Ability Range: 5 to 6  
Preferred Wind Conditions:  
from 4 Beaufort (11 knots +)  
\*without fin and footstraps.

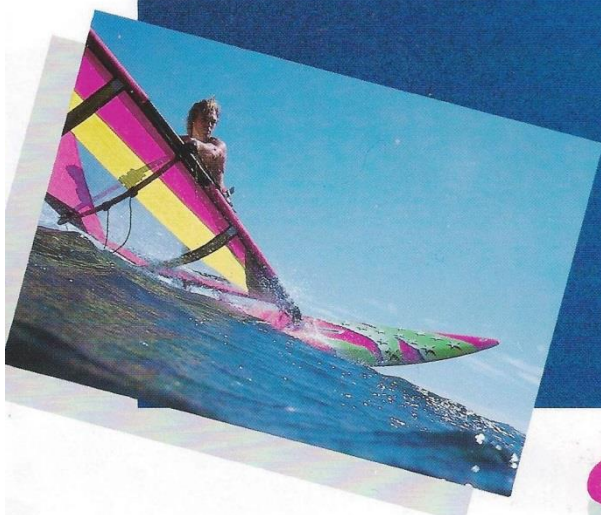




**Klepper 285**  
A new Slalom board from Klepper. A super fast board for flat water or choppy wave conditions. Triple concaves cause the 285 to plane early and rise onto a very small wetted area for high top speed. The board rides smooth and is surprisingly easy to sail. Manoeuvrability is a prominent characteristic, with great foot steering responsiveness. Straight rails and a narrow tail hold in for clean, fast gybes. 100 liters of volume plane you through the lulls, but will require waterstarts from most sailors. This board is definitely race competitive, but remains user friendly.

Length: 285 cm – 9'4"  
Width: 58 cm – 1'10"  
Volume: app. 100 liters  
Weight\*: app. 8.8 kg – 19 lbs.  
Material: Epoxy PC  
Ability Range: 4 to 6  
Preferred Wind Conditions:  
3 to 7 (10 to 35 knots)  
\* without fin and footstraps.

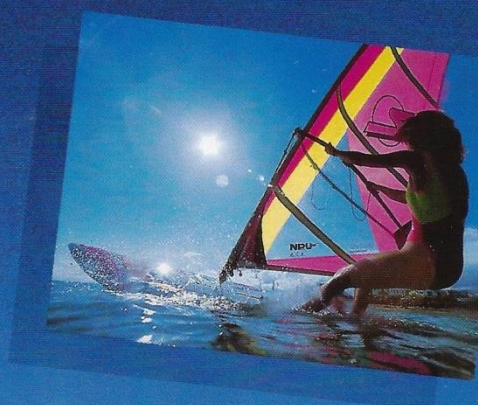




Klepper 295  
The Sporty Floater. The 295  
has already developed a  
loyal following in the 120 liter  
class. The ideal first short  
board. Ample volume for  
most to tack and uphaul.  
The 295 allows you to per-  
form those new manoeuv-  
res with ease; forgiving and  
responsive. Even in force 3  
(10 knots), the benefits of the  
double concave can be  
felt. Stunning new graphics  
compliment this multiface-  
ted performer.

Length: 298 cm - 9'8"  
Width: 62.5 cm - 2'  
Volume: app. 125 liters  
Weight\*: app. 9.6 kg - 21 lbs.  
Material: Epoxy PC  
Ability Range: 4 to 6  
Preferred Wind Conditions:  
3 to 7 (7 to 33 knots)

\* without fin and footstraps.



**Klepper 320**  
 A new breed of Funboard. Capable of introducing its rider to the pleasures of high wind sailing or impressing the more advanced funboard sailor. Amazingly fast and maneuverable in its class. The new quadro concave bottom provides early planing without sacrificing maneuverability. Explore new possibilities with the 320. Easy handling, responsiveness and a fully retractable daggerboard, make the 320 ideal for ladies as well and 155 liters is more than enough to get you home when the wind dies.

**Klepper 320.**  
 Unbelievable fun!

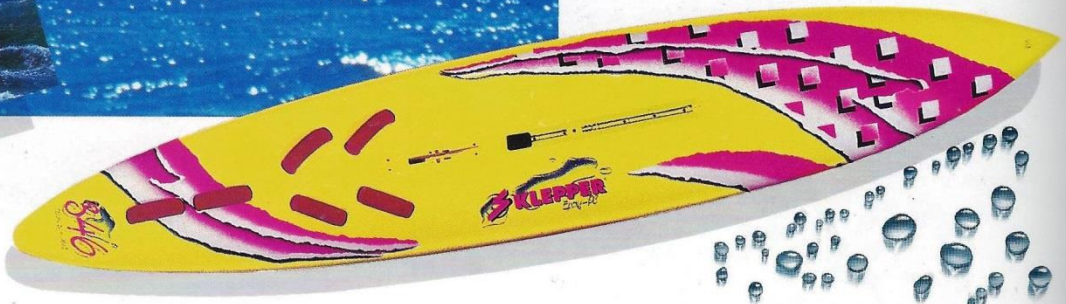
- Length: 320 cm – 10'6"
  - Width: 65 cm – 2'2"
  - Volume: app. 155 liters
  - Weight\*: app. 12.9 kg – 28 lbs.
  - Material: Epoxy PC
  - Ability Range: 3 to 6
  - Preferred Wind Conditions: 3 to 6 (7 to 27 knots)
- \* without daggerboard, fin and footstraps.



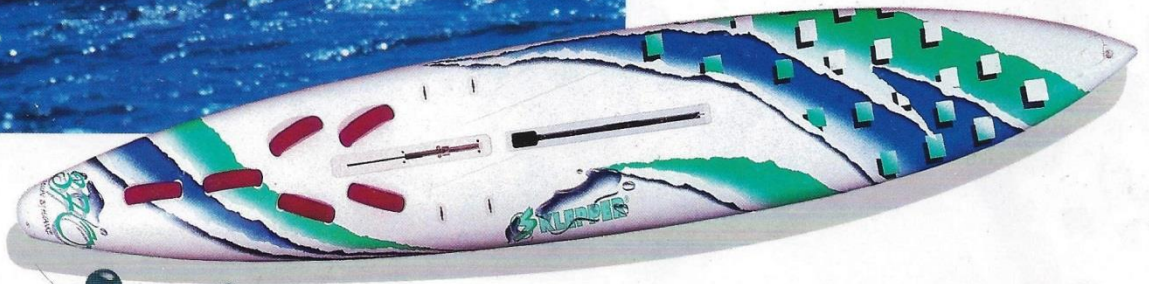
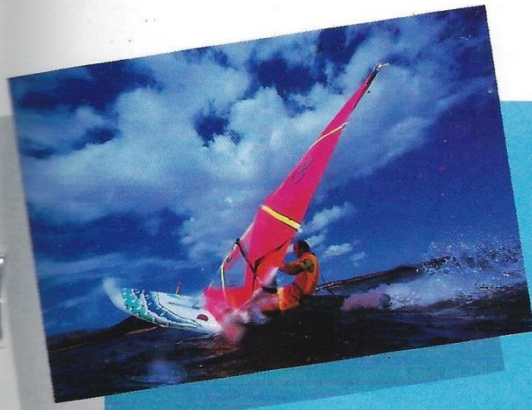


**Klepper 346**  
 A modern, allround Fun-board. The new "Tri-concave" with center "V", planes early while providing a very smooth ride at high speed. The rocker line offers good maneuverability in all wind speeds. 185 liters and great stability make this board a pleasure to sail in all conditions. Equally impressive as a high wind course board, or a sporty family funboard. For those taking their first steps in boardsailing, the 346 is designed for you to progress. A board for all seasons.

- Length: 346 cm - 11'5"
  - Width: 64.5 cm - 2'1"
  - Volume: app. 185 liters
  - Weight\*: app. 13.8 kg - 30 lbs.
  - Material: Epoxy PC
  - Ability Range: 2 to 6
  - Preferred Wind Conditions: 2 to 6 (7 to 27 knots)
- \*without daggerboard, fin and footstraps.







**Klepper 370**  
The ideal Race-Allround board. A Larger, stiffer daggerboard and boxy rails provide exceptional up-wind performance. The quadro concave bottom lifts the 370's light weight onto an early plane and provide a fast, smooth ride due to the rapidly decreasing wetted surface. This board provides dazzling performance throughout the wind range; into or off (25 knots) the 370 is surprisingly easy to handle. This board will make as many friends among recreational sailors, as it will in the racing fleet.

**Klepper 370.**  
On the race course or cruising in the afternoon – the ultimate experience.

Length: 370 cm – 12' 2"  
Width: 67 cm – 2' 2"  
Volume: app. 230 liters  
Weight\*: app. 15.5 kg – 34 lbs.  
Material: Epoxy PC  
Ability Range: 1 to 6  
Preferred Wind Conditions:  
1 to 6 (1 to 27 knots)

\* without daggerboard, fin and footstraps.

The key to our 1988 Sail Design is the "New Angular Cut System" (ACS). This pioneering development from our sailmakers, NPU Sails brings a number of previously divergent qualities together, eg: greater stability, lower centre of effort, more power, better 'twist' characteristics and handling and even reduced downhaul rigging pressure.

The secret to the ACS, (for which patents are pending) is in the construction of the all important radial luff panel. In the ACS the individual panels between each bat-

ten are cut separately and the sail then built up. This enables NPU to vary the depth of camber progressively down the sail to maximise the sailing qualities of each particular sail.

The new Klepper Sails with "ACS", are the power source for our boards. Each line is specially developed for specific conditions, the cut and materials varying accordingly.

Klepper 88 offers a collection of eight sails, divided into 3 lines.



Klepper Vario Top Cap adapts each individual sail to the length of the mast.

## Ultra Cut

Ultra Cut 5.8 m<sup>2</sup>  
A comfort sail which still reaches high top speed with controlled ease. For entry and intermediate sailors, constructed of LDS ripstop cloth which is tough and stable.  
Sail Size: 5.8 m<sup>2</sup> — 62 ft<sup>2</sup>  
Boom: 195 cm — 6'5"  
Luff length: 475 cm — 15'6"



# Ultra Wave

Ultra Wave 4.0 m<sup>2</sup>;  
4.9 m<sup>2</sup>; 5.4 m<sup>2</sup>

The sail for those high wind days. "ACS" gives stability to these sails which are designed and cut with wave sailing and radical manoeuvres in mind. The gentle rotation and well balanced mast and boom length make for easy handling in radical conditions. Constructed in heavy scrim Mylar with high quality fitting; these sails give solid reliable performance in the toughest conditions.

Sail Size	Boom	Luff Length
4.0 m <sup>2</sup> - 43 ft <sup>2</sup>	140 cm - 4'6"	455 cm* - 14'10"
4.9 m <sup>2</sup> - 52 ft <sup>2</sup>	160 cm - 5'3"	465 cm* - 15'3"
5.4 m <sup>2</sup> - 58 ft <sup>2</sup>	175 cm - 5'8"	465 cm* - 15'3"

\* sail with vario top.



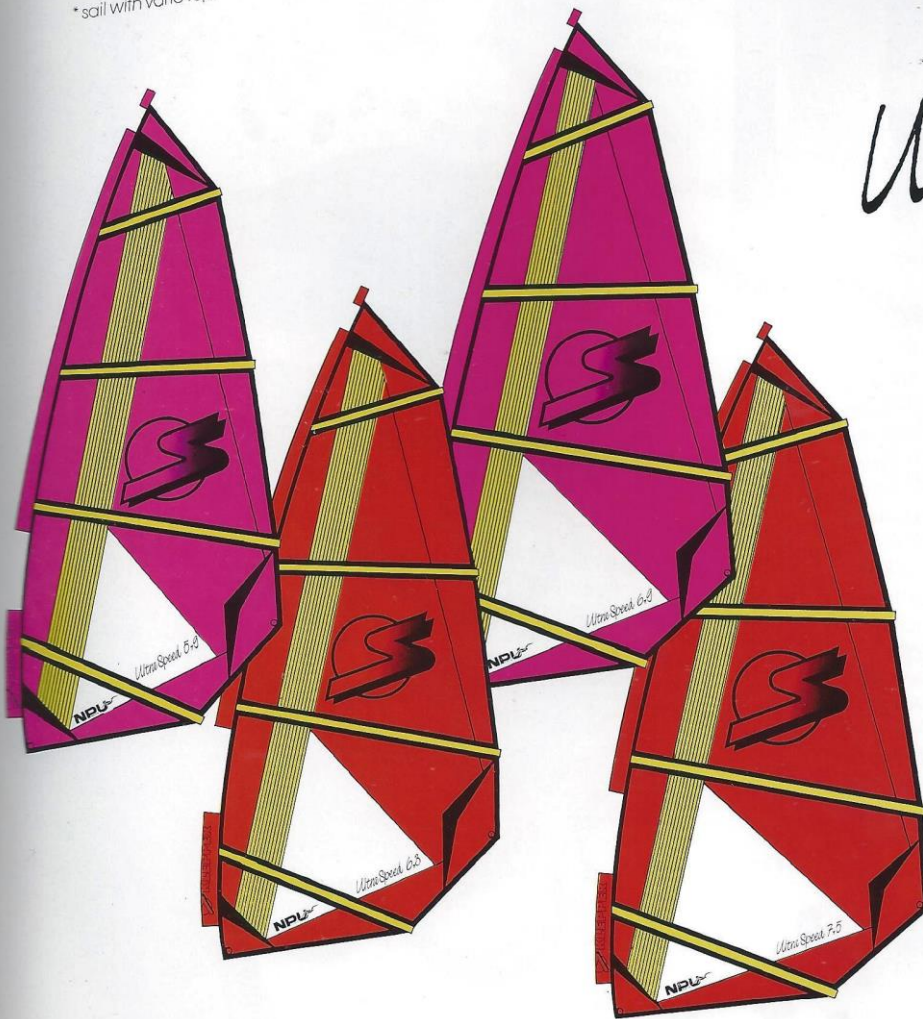
# Ultra Speed

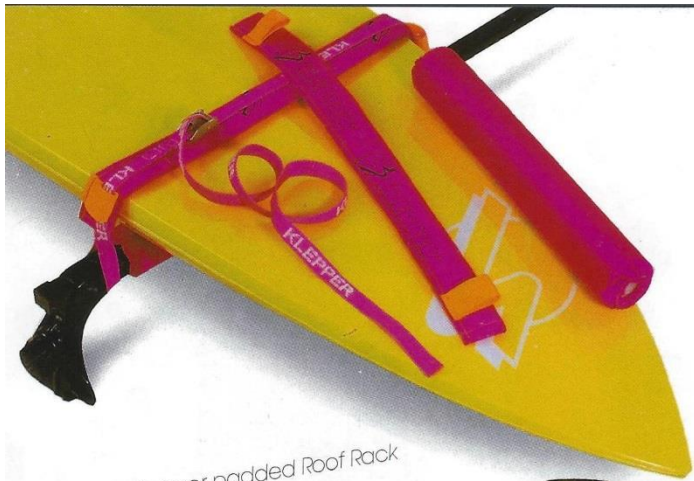
Ultra Speed 5.9 m<sup>2</sup>; 6.3 m<sup>2</sup>;  
6.9 m<sup>2</sup>; 7.5 m<sup>2</sup>

A line of four sails for light to medium winds. A balance of shape stability and weight distribution for early planing and easy manoeuvring. A proven combination of Mylar one sided laminate and double layer reinforcement patches, with break resistant laminated glass sailbattens, newly developed batten tuners for optimum shape control and tear free, stretch free window material.

Sail Size	Boom	Luff Length
5.9 m <sup>2</sup> - 63 ft <sup>2</sup>	190 cm - 6'3"	475 cm* - 15'6"
6.3 m <sup>2</sup> - 67 ft <sup>2</sup>	205 cm - 6'8"	485 cm* - 15'10"
6.9 m <sup>2</sup> - 74 ft <sup>2</sup>	220 cm - 7'3"	495 cm* - 16'3"
7.5 m <sup>2</sup> - 80 ft <sup>2</sup>	230 cm - 7'6"	505 cm* - 16'6"

\* sail with vario top.





Klepper padded Roof Rack Covers.

Klepper Roof Rack Straps with quick release.

The new roofrack strap cover, protects the board from rail damage and boom pressure on the hull when stripped down.

The 1988 Mast Extensions

Two, strong corrosion free mast extensions, offer light weight and easy pin and collar adjustment.  
Short Extension 10 to 25 cm—4" to 10"  
Long Extension 10 to 40 cm—4" to 16"



Klepper Mast Pads 1988  
High or low, sturdy pad with practical velcro closure.



Klepper Daggerboards 1988  
A new shape and a new cassette. The daggerboard, scientifically developed and water tank tested, is stiffer and generates more lift for enhanced upwind performance. A modified slot gasket and redesigned friction pads allow faster, effortless adjustments.



Klepper Mast Top Extension  
Length 25 cm—10"



Klepper Footstraps 1988  
The method of adjustment on our footstraps has been retained, due to its speed and simplicity. New are the neoprene covers with thick double foam padding, which provide even more comfort.



The 1988 Boom

The best quality tubing with a soft but durable cover. Completed with Klepper's pressure resistant front piece and a wide, stable, clew end which has rollers and cleats built in. The new vario system allows fine tuning to the millimeter (even when fully rigged), through its 45 cm threaded extension. The base lengths of the 1988 booms are: 140 cm—4'6", 160 cm—5'4", 190 cm—6'3".



### Klepper Masts 1988

More stiffness through the body and increased flex in the top, give our masts increased stability of the Center of Effort in the sail and better twist control.

Masts	Stiffness	Length
Standard	7.1	485 cm - 5'10"
Heavy Duty Plus Wave Mast*	7.3	485 cm - 5'10"
Heavy Duty Plus XT Wave Mast*	7.5	465 cm - 15'4"

\*warranty effective until the end of 1990

### Klepper Harnessline Set 1988

Strong and extra wide; sturdy manufacturing with steel rings; long lasting. Ingenious, easy harnessline set. Its lined with rubber to stay in place without tying, to allow shifting while sailing.

### Klepper Mast Track 1988

Constructed of strong moulded aluminum, the track smoothly operates in 5 positions. The innovative release mechanism prevents unwanted track shifting. A rig safety leash is built in for security.



### Kleppers New LPR Fin (Laminar Profile)

Developed and tested in a towing tank to perform in the most extreme conditions. Tremendous holding power for such a small fin, combines speed and manoeuvrability.

Klepper LPR  
Klepper Vorfinne  
Klepper LPR-Race

### Light-weight 2-Piece Aluminum Mast.

stiffness 7.1  
length 4.80 m,  
weight only 2.4 kg.

### The Klepper Harness Program

Quality manufacturing and contoured fit, describe our new 1988 harnesses. The Hip Harness for allround use, allows great freedom of movement. Adding the Seat attachment provides comfort on long distance blasts and increases pressure to the rig.

The new Speed Seat has a form fitting shape and evenly distributes twist pressure. The low harness hook facilitates good pressure distribution and excellent power application to the rig. You will sail faster with more ease!



Klepper "Lifestyle Fashion"

Leisure wear for the boardsailor and his/her family. The best material, in new styles from jogging suits to muscle shirts. Some made of 100 % cotton, others blended with synthetic. Through a special weave the clothing has over 90 % cotton contact with the skin.

Klepper "Lifestyle Fashion" stylish and functional.

T-shirt — lilac  
S/M/L/XL  
Klepper Sunglasses  
Available in black or white frames with Klepper print.



Jogging suit — yellow  
S/M/L/XL

Sweatshirt duo — fuchsial green, short sleeve. Can be worn front to front or front to back  
S/M/L/XL

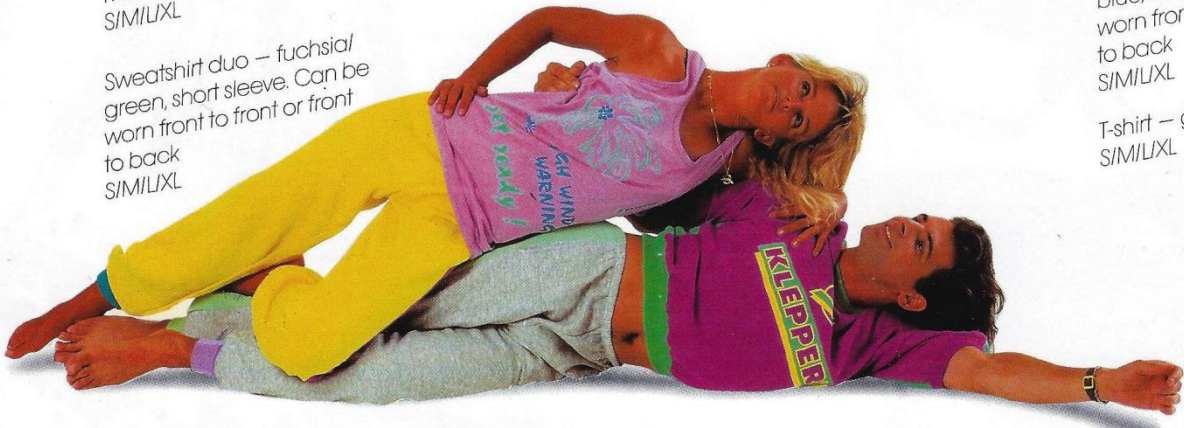
Jogging suit — grey  
S/M/L/XL

Muscle shirt — lilac  
S/M/L/XL

Sweatshirt duo — fuchsial green, short sleeve. Can be worn front to front or front to back  
S/M/L/XL

Sweatshirt duo — fuchsial blue, short sleeve. Can be worn front to front or front to back  
S/M/L/XL

T-shirt — green  
S/M/L/XL





Sweatshirt – grey,  
long sleeve  
SIM/LXL

T-shirt – green  
SIM/LXL

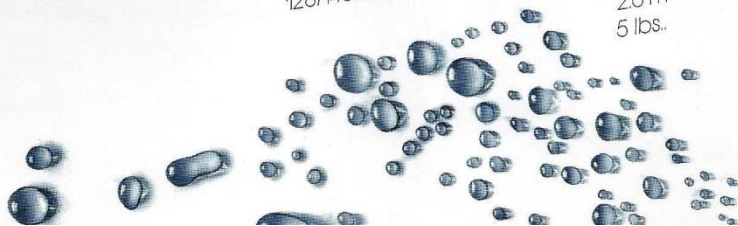
T-shirt – lilac  
SIM/LXL

Klepper Sunglasses  
Available in black or white  
frames with Klepper print.



Childrens Jogging suit  
128/140/152

A complete childs rig of  
2.6 m<sup>2</sup> – 28 ft<sup>2</sup> and only 2 kg –  
5 lbs.





For information on Klepper test sites and vacation packages in the U.S. contact Klepper-NPU inc. (804) 427-1111.

### Windsurf Holidays

You can find all our sailboards at our windsurf resort partners. "Happy Surf & Ski Tours", a specialized travel organization for windsurf holidays, with sites in Rhodes, Kos, Crete, Turkey, Sardinia and Egypt. Here you'll find excellent windsurf stations with great housing. What are you waiting for? Test your Klepper sailboard on a European holiday.

For a brochure, write to:

Happy Surf & Ski Tours  
Hauptstraße 46 b  
2804 Lilienthal  
Phone: 042 98/1973

Happy Surf & Ski Tours  
Lindenschmitstr. 40  
8000 München/Germany  
Phone: 089/7 258888



Austria:  
Sail & Surf Ges.m.b.H.  
Kreutererstraße 49  
A-4820 Bad Ischl

Belgium:  
Telstar Harderwijk b.v.  
Lorentzstraat 16  
NL-3840 AC Harderwijk

Cyprus:  
A + S Windsurfing Connection  
P.O. Box 1335  
CY Limassol

Denmark:  
Fun Sport APS  
Strandvejen 54  
DK-7120 Vejle-East

Finland:  
Radical Sport OY  
Tuusulantie 40  
SF-04200 Kerava

Germany:  
Klepper Bootsbau KG  
Klepperstraße 18  
D-8200 Rosenheim

Greece:  
Captain Nemos  
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GR-18536 Marina Zea Piraeus  
Tel. 451 6178

Iceland:  
Water + Wind  
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IS-101 Reykjavik

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Yamit Y.S.B. Ltd.  
P.O. Box 16285  
IL-Marine Tel Aviv

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White Reef s.n.c.  
Via N.Dell'Amore 5  
I-47023 Cesena

Japan:  
Kanematsu Goshu Ltd.  
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Higashi - Ku  
J Osaka (541)

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Airtool AG  
Seestraße 145  
CH-8703 Erlenbach

Luxembourg:  
Citabel Sport  
58 Rue des Ceibes  
L-1310 Luxembourg/Merl

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1a Abercrombie Street  
GB London SW 11 2 JB

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Lorentzstraat 16  
NL-3840 AC Harderwijk

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N-0555 Oslo 5

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Rua Carlos de Oliveira 1E-1A  
P-1600 Lisboa

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Outdoor Centre Ltd.  
80 Boshoff Street  
ZA-3200 Pietermaritzburg

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Calle Mallorca 219  
E-08008 Barcelona

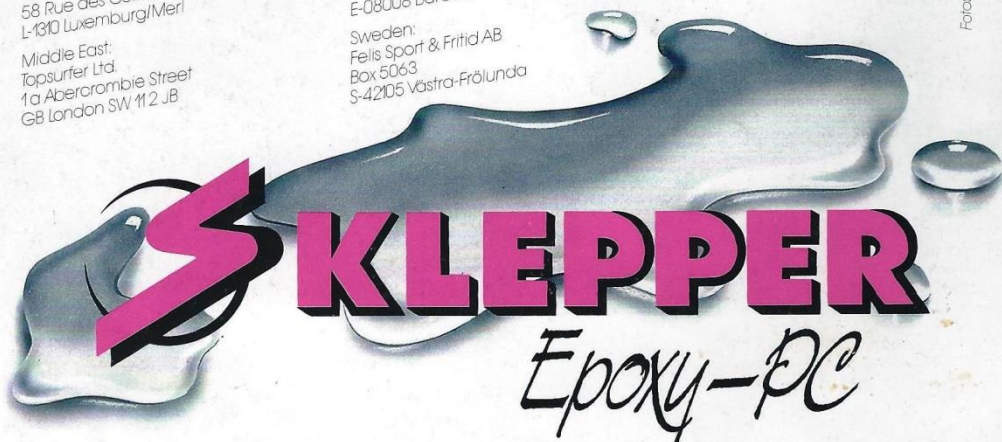
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Virginia Beach VA 23456  
Tel. 804 427 1111



Technical details subject to change