

# The wings...

# Dynamic

Since 1996, DTA has offered the flying public a range of innovative wings. Each wing type having its own specific advantages: Speed for the Dynamic 15/430\*, Discretion for the Dynamic 16/430, and for the Dynamic 450\*\*, efficiency and good-manners. Your choice !

All the wings are particularly well-behaved and safe in all speed ranges, precise in the turns and easy to fly. The wings accelerate with having to be forced and respond to the lightest control inputs. Thanks to their flexibility, and the ergonomic positioning of the control bar, and the unequalled comfort of DTA trikes, the pilot lands fresh and ready to continue.

Also, the four trike-wing mount positions of each wing allows you to quickly change the wing's neutral speed range to what you want at the time.

After delivery to DTA, each wing is individually tested and flight checked at Montélimar.

Even more from DTA, without extra costs :  
choose the color of the leading edge and the two under-surface colors  
also even a symmetrical or asymmetrical design



symmetrical

asymmetrical

3 panel option

DTA's wings are technologically advanced !

- Upper- surface of white anti-UV treated trilam
- NEW ! Leading edge of 180 g/m<sup>2</sup> DACRON
- Under-surface of 180 g/m<sup>2</sup> Dacron reinforced with Trilam reinforced batten pockets
- Integral Cell construction in wing Hang-bracket cube assembly is 80mm
- Struts and King-post are streamlined Powder-coated white to reduce corrosion
- The Menziken Structure is of high tensile aluminium alloy verified by the current Foucault method according to Air Standard 9049C
- NEW ! Short folding : 4,50 m

**Our wings have been calculated CAO and tested under the SUPERVISION OF BUREAU VERITAS at the ultimate load limit of +6g -3g.**

**DTA wings are developed in conjunction with Ellipse, a world renowned delta-wing manufacturer. This partnership with Ellipse is an additional guarantee of quality and workmanship and brings to DTA wings all the technical knowledge of weight-shift wing design.**

\* French two-seat Champion 1999 and 2000 & European two-seat Champion 2000

\*\* French two-seat Champion 2001 and 2002

... the wings ...

# Dynamic

Nimble and precise even  
at 472,5 kg...

# 450

The Dynamic 450 is reliable, nimble and precise-handling. It was designed to maintain its ease of handling and its wide speed range whatever the load. It handles turbulence with exemplary manners. This wing ably handles short-field take-offs and landings, even at maximum take-off weight and handles brilliantly at high speed with only moderate fuel consumption.

The Dynamic 450 has been tested to 472,5 kg, and was chosen by Olivier Aubert for his trans-continental flights. This is the wing for those who fly regularly with a co-pilot and lots of baggage.

Characteristics of Dynamic 450			
VNE	160 km/h	Wing weight	59 kg
Maximum Take Off Weight / with chute	450 / 472,5 kg	Wing area	15,50 m <sup>2</sup>
Speed range-(control bar neutral - 4 positions)	78 to 110 km/h	Wing span	10,20 m
Uppersurface battens	28	Undersurface battens	8
Dual surface %:	80%	Nose angle :	125°
Flight Load limits	+ 4g - 2 g	Tested to :	+ 6 g - 3 g

examples of configuration	Voyageur		Feeling		Evolution		Combo
Engine	Rotax 582	Rotax 912	Rotax 582	Rotax 912 S	Rotax 582	Rotax 912	Rotax 503 C
Empty weight : trike + wing	198 kg	223 kg	202 kg	230 kg	188 kg	213 kg	171 kg
Pay load (MTOW at 450 kg)	252 kg	227 kg	248 kg	220 kg	262 kg	237 kg	279 kg
Maximum speed (level flight)*	123 km/h	130 km/h	130 km/h	138 km/h	123 km/h	130 km/h	115 km/h
Cruising speed	90 km/h	90 km/h	95 km/h	100 km/h	90 km/h	90 km/h	90 km/h
Minimum speed*	55 km/h	58 km/h	55 km/h	58 km/h	52 km/h	54 km/h	52 km/h
Ground Roll*	85 m	80 m	85 m	70 m	80 m	75 m	80 m
Climb rate (to 75km/h)*	5 m/s	5,4 m/s	5 m/s	6 m/s	5,2 m/s	5,6 m/s	3,5 m/s
Landing Distance (Dry)*	45 m	50 m	70 m	75 m	70 m	70 m	70 m
minimum sink rate (75 km/h)*	2,5 m/s	2,8 m/s	2,5 m/s	2,8 m/s	2,4 m/s	2,7 m/s	2,3 m/s
Fuel Consumption @ economy cruise*	12 L to 85 km/h	10 L to 90 km/h	11 L to 85 km/h	9,5 L to 90 km/h	12 L to 85 km/h	10 L to 90 km/h	13 L to 80 km/h
Aspect ratio	7.8	7	7,8	7	8,1	7,2	8,4

\* Performances are given for 180 kg load

... the wings ...

# Dynamic

Lively and  
light-handling which truly  
performs...

# 15/430

With particularly mild and gentle pitch and roll characteristics, the Dynamic 15/430 is a very reliable wing and remarkably precise handling even at its maximum take-off weight of 430 kg. The neutral position is well defined yet only requires light and gentle control inputs.

A cruise speed of 110 km/h (60 knots) can be maintained without effort. The Dynamic 15/430 accelerates and loses speed very easily. The wing handles excellently at low speed with an easy and progressive flare on landing.

If you like your wing to be lively and light-handling, which truly performs, try the Dynamic 15/430. You will find it an immense pleasure to fly.

## Characteristics of Dynamic 15/430

VNE	160 km/h	Wing weight	54 kg
Maximum Take Off Weight	430 kg	Wing area	13,60 m <sup>2</sup>
Speed range-(control bar neutral - 4 positions)	65 to 100 km/h	Wing span	9,80 m
Uppersurface battens	26	Undersurface battens	10
Dual surface %:	80%	Nose angle :	125°
Flight Load limits	+ 4g - 2 g	Tested to :	+ 6 g - 3 g

examples of configuration	Voyageur		Feeling		Evolution		Combo
Engine	Rotax 582	Rotax 912	Rotax 582	Rotax 912 S	Rotax 503	Rotax 582	Rotax 503 C
Empty weight : trike + wing	193 kg	218 kg	197 kg	225 kg	173 kg	183 kg	166 kg
Pay load	237 kg	212 kg	233 kg	205 kg	257 kg	247 kg	264 kg
Maximum speed (level flight)*	128 km/h	135 km/h	138 km/h	143 km/h	118 km/h	128 km/h	120 km/h
Cruising speed	90 km/h	90 km/h	100 km/h	110 km/h	90 km/h	90 km/h	90 km/h
Minimum speed*	56 km/h	60 km/h	56 km/h	60 km/h	53 km/h	54 km/h	53 km/h
Ground Roll*	80 m	75 m	80 m	65 m	85 m	75 m	80 m
Climb rate (to 75km/h)*	5 m/s	5,2 m/s	5 m/s	6 m/s	3,5 m/s	5 m/s	3,5 m/s
Landing Distance (Dry)*	45 m	50 m	70 m	75 m	70 m	70 m	70 m
minimum sink rate (75 km/h)*	3 m/s	3,2 m/s	3 m/s	3,2 m/s	2,7 m/s	2,9 m/s	2,6 m/s
Fuel Consumption @ economy cruise*	12,5 L to 85 km/h	10,5 L to 90 km/h	11,5 L to 85 km/h	10 L to 90 km/h	14 L to 80 km/h	12,5 L to 85 km/h	13,5 L to 80 km/h
Aspect ratio	6,5	6,1	6,5	6,1	7,2	6,7	7,5

\* Performances are given for an 180 kg load

*the wings ...*



# Dynamic 16/430

**. Soft, gentle and well-behaved!**

*Tested at 430 kg, the Dynamic 16/430 wing tolerates the fast, the slow and the awkward. It will land on a handkerchief, the beach and will even let you go on long trips. The handling stays precise even in the worst turbulence.*

*This wing, attached to either DTA's Evolution or Combo 503 trike, has been chosen by numerous flight training facilities as the ideal training aircraft.*

## Characteristics of Dynamic 16

<b>VNE</b>	140 km/h	<b>Wing weight</b>	54 kg
<b>Maximum Take Off Weight</b>	430 kg	<b>Wing area</b>	14,50 m <sup>2</sup>
<b>Speed range-(control bar neutral - 4 positions)</b>	65 à 90 km/h	<b>Wing span</b>	10,20 m
<b>Uppersurface battens</b>	24	<b>Undersurface battens</b>	8
<b>Dual surface %:</b>	75%	<b>Nose angle :</b>	125°
<b>Flight Load limits</b>	+ 4g - 2 g	<b>Tested to :</b>	+ 6 g - 3 g

examples of configuration	Voyageur	Feeling	Evolution		Combo
<b>Engine</b>	Rotax 582	Rotax 582	Rotax 503	Rotax 582	Rotax 503 C
Empty weight : trike + wing	193 kg	197 kg	173 kg	183 kg	166 kg
Pay load	237 kg	233 kg	257 kg	247 kg	264 kg
Maximum speed (level flight)*	118 km/h	120 km/h	115 km/h	118 km/h	115 km/h
Cruising speed	80 km/h	85 km/h	80 km/h	80 km/h	80 km/h
Minimum speed*	53 km/h	53 km/h	52 km/h	52 km/h	52 km/h
Ground Roll*	80 m	80 m	85 m	75 m	80 m
Climb rate (à 75km/h)*	5 m/s	5 m/s	3,5 m/s	5,2 m/s	3,5 m/s
Landing Distance (Dry)*	45 m	70 m	70 m	70 m	70 m
minimum sink rate (75 km/h)*	2,5 m/s	2,5 m/s	2,3 m/s	2,4 m/s	2,3 m/s
Fuel Consumption @ economy cruise'	12 L à 85 km/h	11 L à 85 km/h	12 L à 85 km/h	10 L à 90 km/h	13 L à 80 km/h
Aspect ratio	7.8	7,8	8,4	8,1	8,4

\* Performances are given for 180 kg load

