



# Diamond Delta ( $\Delta$ ) Chains

## Extended chain life Demanding applications

**Diamond Delta** ( $\Delta$ ) chains have been designed and developed through Sedis (France) technology for very severe conditions :

- Application : High speed
- Environment : Abrasive dust, contamination
- Maintenance : Irregular lubrication

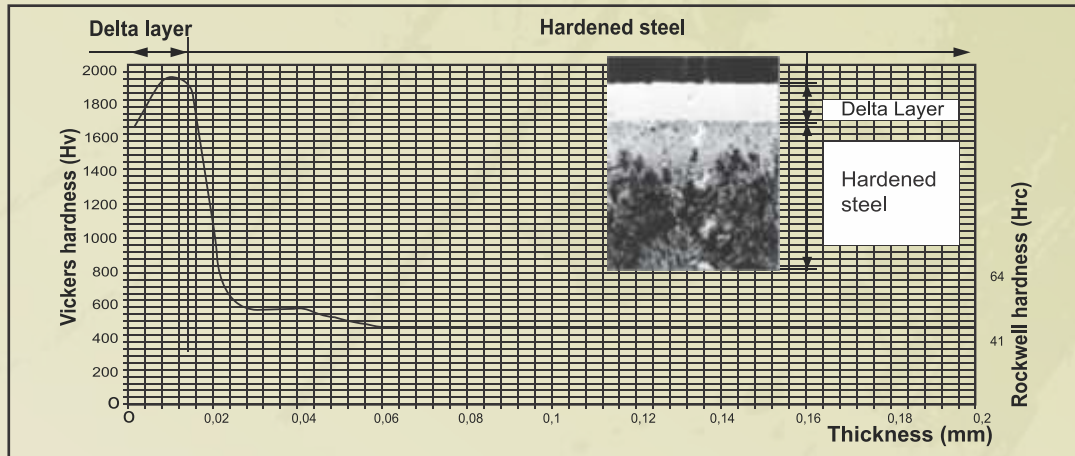
The **Delta** ( $\Delta$ ) treatment specification has a higher hardness, (exceeding 1400 Hv vickers) than that achieved by case-hardening which is around 800 Hv, Therefore **Delta** ( $\Delta$ ) treatment provides greater durability in comparison to chains with case hardened steel bearing pins in equivalent conditions.

- **Diamond Delta** ( $\Delta$ ) chains have extractable pins allowing easy maintenance.
- **Diamond Delta** ( $\Delta$ ) chains are manufactured with precise length control.
- Special treatment on link plates to provide more corrosion protection.
- Solid bush provides better impact and wear resistance.



## DELTA PIN

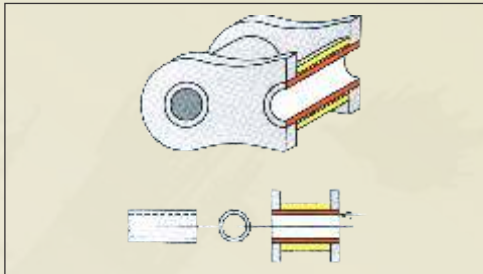
Graph and metallurgical cross-section of **Delta** ( $\Delta$ ) layer in hardened and tempered steel :



After the **Delta** ( $\Delta$ ) treatment, the metal at the core of the part is unchanged, achieving a high resistance hardened and tempered steel specification while maintaining its elastic properties. The surface, however, consists of a diffused carbide layer with a very high level of hardness.

The **Delta** ( $\Delta$ ) layer is completely integrated with the core of the part avoiding any risk of stripping or flaking.

## SOLID BUSH



**Diamond Delta** ( $\Delta$ ) chains are made with solid bushes for improved chain performance and low maintenance.

Solid bushes with controlled ovality and straightness helps in eliminating barrelling effect during assembly towards improved wear resistance.

## SPECIAL SURFACE PROTECTION

**Diamond Delta** ( $\Delta$ ) has got its brand uniqueness by its blackened plates; the plates have a distinctive finish giving the chain a longer corrosion resistance to environment.



## SHOT PEENING

**Diamond Delta** ( $\Delta$ ) plates and rollers are shot peened for improved fatigue and impact strength.



## EXTRA PRE-STRETCHED



**Diamond Delta** ( $\Delta$ ) chains are pre-stretched more than ISO standard specification to enhance the performance in terms of fatigue and elongation.

## CLOSE LENGTH TOLERANCE



**Diamond Delta** ( $\Delta$ ) chains are manufactured to closer length tolerance for precise applications.

## SPECIAL GREASING



**Diamond Delta** ( $\Delta$ ) chains are vacuum greased for effective penetration of lubricant in annular spaces for improved performance.



## STANDARD ROLLER CHAINS - DIAMOND DELTA

### BRITISH & AMERICAN STANDARD :

S.No.	* Standard	Intl Ref No.	Diamond Chain No.	Pitch (P)	Width between Inner Plates (W) Min	Roller Dia (D) Max	Bearing Pin Dia (d) Max	Plate Height H (Max)	Plate Thickness		Width over Bearing Pin (A) Max	Width over Joint Fasteners (B) Max	Projected Bearing Area (Sq. cm)	Avg Weight per metre (Kg)	Tensile Strength (Kgf) min
									IP (T1)	OP (T2)					
1	British	08B - 1	XD083 01	12.70	7.75	8.51	4.45	11.80	1.50	1.50	17.00	20.90	0.50	0.68	1840
2		10B - 1	XD101 01	15.875	9.65	10.16	5.08	14.70	1.50	1.50	19.60	23.70	0.67	0.91	2290
3		12B - 1	XD120 01	19.05	11.68	12.07	5.72	16.10	1.78	1.78	22.70	27.30	0.88	1.12	2960
4		16B - 1	XD160 01	25.40	17.02	15.88	8.28	21.00	3.60	3.05	36.10	41.50	2.07	2.59	6120
5	American	40-1	XQ08A 01	12.70	7.85	7.92	3.98	12.00	1.50	1.50	17.80	21.70	0.44	0.63	1840
6		50-1	XQ102 01	15.875	9.40	10.16	5.09	15.00	2.00	2.00	21.80	25.90	0.71	1.04	2700
7		60-1	XQ121 01	19.05	12.58	11.91	5.96	18.00	2.39	2.39	26.90	31.50	1.04	1.52	3800
8		80-1	XQ161 01	25.40	15.75	15.88	7.94	24.10	3.15	3.15	33.50	38.90	1.77	2.58	7800

\* Multistrand chains available based on request.

### Delta ( $\Delta$ ) pins have the following advantages over standard case hardened pin chain :

- **Improved resistance to corrosion** in wet and humid conditions.
- **Greatly increased resistance to wear** and elongation.

The **Delta** ( $\Delta$ ) treatment, now supported by many years of experience, has consistently provided an increase in chain life in a wide range of applications.

