

Ref **370 / 374** :

EXPERT DRILL

stainless steel



Successfully tested worldwide !



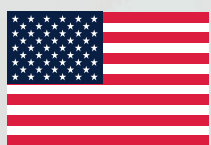
> 7'000 holes

Thickness: 8 mm / Ø 1.85 /inox 904L



> 65'000 holes

Thickness: 4 mm / Ø 1.10 /inox 316L



> 45'000 holes

Thickness: 3 mm / Ø 2.50 /inox 410

Available with or without coolant hole

Comparative trial

- Tested tools: Drill 370 Ø 1.85 x 12 mm / Standard drill Ø 1.85 x 12 mm
- Machined material : Inox 904L and 316L
- Thickness : 150 x 100 x 8 mm
- Through holes

Cutting conditions :

$V_c =$ 30 m/min
 $f =$ 0.04 mm
 $n =$ 5164 tr/min
 $V_f =$ 200 mm/min
Peck drilling = 0.37 mm

Cutting oil

End of life criteria

- Broken tool
- Ø out of tolerances : ± 0.01 mm
- Conical hole max 0.01
- Excessive burr
- Hole location : ± 0.01 mm



Results :

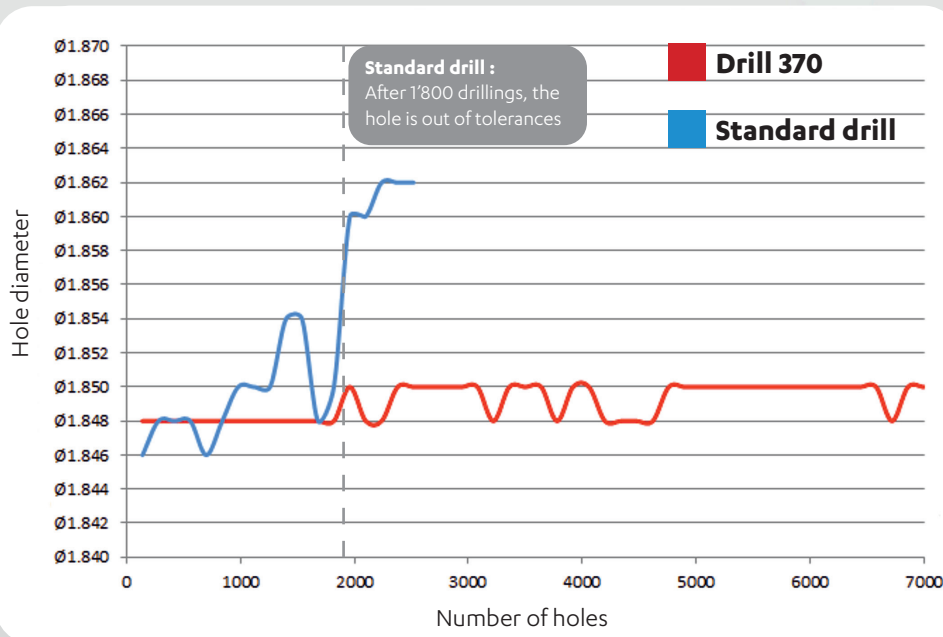
**Drilling
with
ref. 370**

- Less burrs

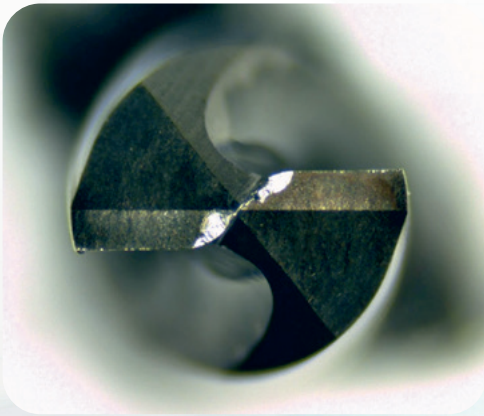
- Short chips

- Holes more accurate

- Cleaner holes

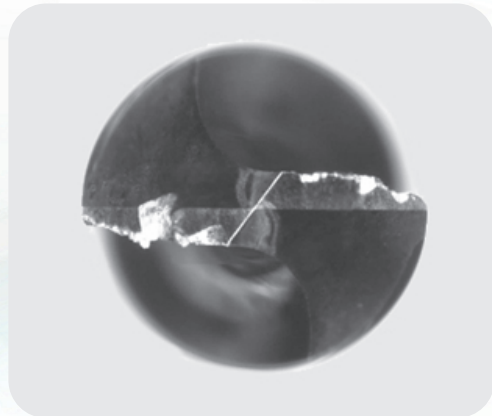


Drill 370



> 7'000 holes

Standard drill



1'800 holes

Examination of the chips

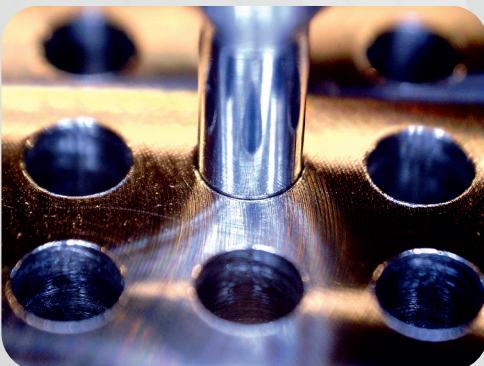


- Fragmentation of the chips
- No chip coiled around the tool shank

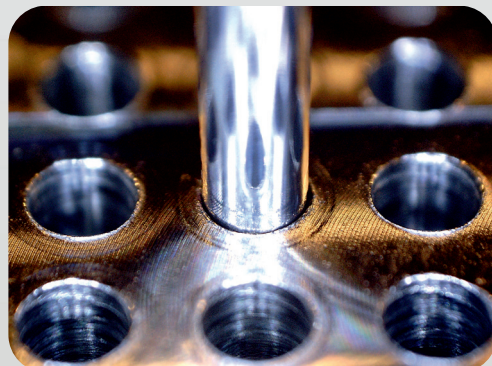


- Long chips
- Building of a cluster of chips around the tool shank

Holes geometries comparison



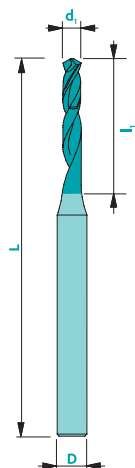
- Less conicity
- Cleaner holes
- Small burrs



- More conicity
- More burrs
- Marks on holes

370

EXPERT drill - stainless steel



Ø drill	f [mm/rotation]	Vc [m/min]	Pecking
Ø 0.50 - Ø 0.70	0.01 / 0.015	25	1/3xØ
Ø 0.71 - Ø 0.99	0.015 / 0.02	25	1/3xØ
Ø 1.00 - Ø 1.50	0.02 / 0.03	30	1/3xØ
Ø 1.50 - Ø 2.00	0.03 / 0.04	30	1/3xØ
Ø 2.00 - Ø 3.00	0.045 / 0.055	30	1/3xØ

Pre-centering with center drill ref. 337-2 recommended for diameters <1.00 mm

Tolerances

d_1 : -0.002/-0.004
 L_1 : 0.1/-0

D: h5

Nemo coated



135°

Z2



λ
Variable

CARB

Art. n°	d_1	L_1	D	L	Art. n°	d_1	L_1	D	L
370d0.50NM	0.50	4	3	38	370d0.79NM	0.79	5	3	38
370d0.51NM	0.51	4	3	38	370d0.80NM	0.80	6	3	38
370d0.52NM	0.52	4	3	38	370d0.81NM	0.81	6	3	38
370d0.53NM	0.53	4	3	38	370d0.82NM	0.82	6	3	38
370d0.54NM	0.54	4	3	38	370d0.83NM	0.83	6	3	38
370d0.55NM	0.55	4	3	38	370d0.84NM	0.84	6	3	38
370d0.56NM	0.56	4	3	38	370d0.85NM	0.85	6	3	38
370d0.57NM	0.57	4	3	38	370d0.86NM	0.86	6	3	38
370d0.58NM	0.58	4	3	38	370d0.87NM	0.87	6	3	38
370d0.59NM	0.59	4	3	38	370d0.88NM	0.88	6	3	38
370d0.60NM	0.60	5	3	38	370d0.89NM	0.89	6	3	38
370d0.61NM	0.61	5	3	38	370d0.90NM	0.90	6	3	38
370d0.62NM	0.62	5	3	38	370d0.91NM	0.91	8	3	38
370d0.63NM	0.63	5	3	38	370d0.92NM	0.92	8	3	38
370d0.64NM	0.64	5	3	38	370d0.93NM	0.93	8	3	38
370d0.65NM	0.65	5	3	38	370d0.94NM	0.94	8	3	38
370d0.66NM	0.66	5	3	38	370d0.95NM	0.95	8	3	38
370d0.67NM	0.67	5	3	38	370d0.96NM	0.96	8	3	38
370d0.68NM	0.68	5	3	38	370d0.97NM	0.97	8	3	38
370d0.69NM	0.69	5	3	38	370d0.98NM	0.98	8	3	38
370d0.70NM	0.70	5	3	38	370d0.99NM	0.99	8	3	38
370d0.71NM	0.71	5	3	38	370d1.00NM	1.00	8	3	38
370d0.72NM	0.72	5	3	38	370d1.01NM	1.01	8	3	38
370d0.73NM	0.73	5	3	38	370d1.02NM	1.02	8	3	38
370d0.74NM	0.74	5	3	38	370d1.03NM	1.03	8	3	38
370d0.75NM	0.75	5	3	38	370d1.04NM	1.04	8	3	38
370d0.76NM	0.76	5	3	38	370d1.05NM	1.05	8	3	38
370d0.77NM	0.77	5	3	38	370d1.06NM	1.06	8	3	38
370d0.78NM	0.78	5	3	38	370d1.07NM	1.07	8	3	38



EXPERT drill - stainless steel



370

Continuation

Art. n°	d ₁	l ₁	D	L	Art. n°	d ₁	l ₁	D	L
370d1.08NM	1.08	8	3	38	370d1.50NM	1.50	10	3	38
370d1.09NM	1.09	8	3	38	370d1.55NM	1.55	10	3	38
370d1.10NM	1.10	8	3	38	370d1.60NM	1.60	10	3	38
370d1.11NM	1.11	8	3	38	370d1.65NM	1.65	10	3	38
370d1.12NM	1.12	8	3	38	370d1.70NM	1.70	12	3	38
370d1.13NM	1.13	8	3	38	370d1.75NM	1.75	12	3	38
370d1.14NM	1.14	8	3	38	370d1.80NM	1.80	12	3	38
370d1.15NM	1.15	8	3	38	370d1.85NM	1.85	12	3	38
370d1.16NM	1.16	8	3	38	370d1.90NM	1.90	12	3	38
370d1.17NM	1.17	8	3	38	370d1.95NM	1.95	12	3	38
370d1.18NM	1.18	8	3	38	370d2.00NM	2.00	12	3	38
370d1.19NM	1.19	8	3	38	370d2.05NM	2.05	12	3	38
370d1.20NM	1.20	8	3	38	370d2.10NM	2.10	12	3	38
370d1.21NM	1.21	8	3	38	370d2.15NM	2.15	12	3	38
370d1.22NM	1.22	8	3	38	370d2.20NM	2.20	12	3	38
370d1.23NM	1.23	8	3	38	370d2.25NM	2.25	12	3	38
370d1.24NM	1.24	8	3	38	370d2.30NM	2.30	12	3	38
370d1.25NM	1.25	8	3	38	370d2.35NM	2.35	12	3	38
370d1.26NM	1.26	8	3	38	370d2.40NM	2.40	12	3	38
370d1.27NM	1.27	8	3	38	370d2.45NM	2.45	12	3	38
370d1.28NM	1.28	8	3	38	370d2.50NM	2.50	12	3	38
370d1.29NM	1.29	8	3	38	370d2.60NM	2.60	12	3	38
370d1.30NM	1.30	8	3	38	370d2.70NM	2.70	12	3	38
370d1.31NM	1.31	8	3	38	370d2.80NM	2.80	12	3	38
370d1.32NM	1.32	8	3	38	370d2.90NM	2.90	12	3	38
370d1.33NM	1.33	8	3	38	370d3.00NM	3.00	12	3	38
370d1.34NM	1.34	8	3	38					
370d1.35NM	1.35	8	3	38					
370d1.36NM	1.36	8	3	38					
370d1.37NM	1.37	8	3	38					
370d1.38NM	1.38	8	3	38					
370d1.39NM	1.39	8	3	38					
370d1.40NM	1.40	8	3	38					
370d1.41NM	1.41	8	3	38					
370d1.42NM	1.42	8	3	38					
370d1.43NM	1.43	8	3	38					
370d1.44NM	1.44	8	3	38					
370d1.45NM	1.45	8	3	38					
370d1.46NM	1.46	8	3	38					
370d1.47NM	1.47	8	3	38					
370d1.48NM	1.48	8	3	38					
370d1.49NM	1.49	8	3	38					



Nemo coated



135°

Z2

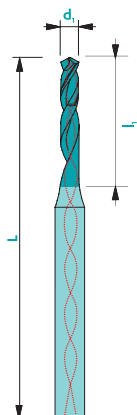


λ
Variable

CARB

374

EXPERT drill for stainless steel - with coolant holes



Ø drill	f [mm/rotation]	Vc [m/min]	Pecking
Ø 0.70 - Ø 0.99	0.015 / 0.025	45	2xØ
Ø 1.00 - Ø 1.50	0.025 / 0.035	45	2xØ
Ø 1.50 - Ø 2.00	0.035 / 0.05	45	2xØ
Ø 2.00 - Ø 3.00	0.05 / 0.075	45	2xØ

Pre-centering with center drill ref. 337-2 recommended for diameters <1.00 mm

Tolerances

d_1 : -0.002/-0.004
 L_1 : 0.1/-0

D: h5

Nemo coated



135°

Z2

CARB



Art. n°	d_1	L_1	D	L
374d0.70NM	0.70	8	3	50
374d0.71NM	0.71	8	3	50
374d0.72NM	0.72	8	3	50
374d0.73NM	0.73	8	3	50
374d0.74NM	0.74	8	3	50
374d0.75NM	0.75	8	3	50
374d0.76NM	0.76	8	3	50
374d0.77NM	0.77	8	3	50
374d0.78NM	0.78	8	3	50
374d0.79NM	0.79	8	3	50
374d0.80NM	0.80	8	3	50
374d0.81NM	0.81	8	3	50
374d0.82NM	0.82	8	3	50
374d0.83NM	0.83	8	3	50
374d0.84NM	0.84	8	3	50
374d0.85NM	0.85	8	3	50
374d0.86NM	0.86	8	3	50
374d0.87NM	0.87	8	3	50
374d0.88NM	0.88	8	3	50
374d0.89NM	0.89	8	3	50
374d0.90NM	0.90	10	3	50
374d0.91NM	0.91	10	3	50
374d0.92NM	0.92	10	3	50
374d0.93NM	0.93	10	3	50
374d0.94NM	0.94	10	3	50
374d0.95NM	0.95	10	3	50
374d0.96NM	0.96	10	3	50
374d0.97NM	0.97	10	3	50
374d0.98NM	0.98	10	3	50
374d0.99NM	0.99	10	3	50
374d1.00NM	1.00	12	3	50

Art. n°	d_1	L_1	D	L
374d1.01NM	1.01	12	3	50
374d1.02NM	1.02	12	3	50
374d1.03NM	1.03	12	3	50
374d1.04NM	1.04	12	3	50
374d1.05NM	1.05	12	3	50
374d1.06NM	1.06	12	3	50
374d1.07NM	1.07	12	3	50
374d1.08NM	1.08	12	3	50
374d1.09NM	1.09	12	3	50
374d1.10NM	1.10	12	3	50
374d1.11NM	1.11	12	3	50
374d1.12NM	1.12	12	3	50
374d1.13NM	1.13	12	3	50
374d1.14NM	1.14	12	3	50
374d1.15NM	1.15	12	3	50
374d1.16NM	1.16	12	3	50
374d1.17NM	1.17	12	3	50
374d1.18NM	1.18	12	3	50
374d1.19NM	1.19	12	3	50
374d1.20NM	1.20	14	3	50
374d1.21NM	1.21	14	3	50
374d1.22NM	1.22	14	3	50
374d1.23NM	1.23	14	3	50
374d1.24NM	1.24	14	3	50
374d1.25NM	1.25	14	3	50
374d1.26NM	1.26	14	3	50
374d1.27NM	1.27	14	3	50
374d1.28NM	1.28	14	3	50
374d1.29NM	1.29	14	3	50
374d1.30NM	1.30	14	3	50
374d1.31NM	1.31	14	3	50



EXPERT drill for stainless steel - with coolant holes



374

Continuation

Art. n°	d ₁	l ₁	D	L	Art. n°	d ₁	l ₁	D	L
374d1.32NM	1.32	14	3	50	374d1.74NM	1.74	18	3	50
374d1.33NM	1.33	14	3	50	374d1.75NM	1.75	18	3	50
374d1.34NM	1.34	14	3	50	374d1.76NM	1.76	18	3	50
374d1.35NM	1.35	14	3	50	374d1.77NM	1.77	18	3	50
374d1.36NM	1.36	14	3	50	374d1.78NM	1.78	18	3	50
374d1.37NM	1.37	14	3	50	374d1.79NM	1.79	18	3	50
374d1.38NM	1.38	14	3	50	374d1.80NM	1.80	18	3	50
374d1.39NM	1.39	14	3	50	374d1.81NM	1.81	18	3	50
374d1.40NM	1.40	14	3	50	374d1.82NM	1.82	18	3	50
374d1.41NM	1.41	14	3	50	374d1.83NM	1.83	18	3	50
374d1.42NM	1.42	14	3	50	374d1.84NM	1.84	18	3	50
374d1.43NM	1.43	14	3	50	374d1.85NM	1.85	18	3	50
374d1.44NM	1.44	14	3	50	374d1.86NM	1.86	18	3	50
374d1.45NM	1.45	14	3	50	374d1.87NM	1.87	18	3	50
374d1.46NM	1.46	14	3	50	374d1.88NM	1.88	18	3	50
374d1.47NM	1.47	14	3	50	374d1.89NM	1.89	18	3	50
374d1.48NM	1.48	14	3	50	374d1.90NM	1.90	18	3	50
374d1.49NM	1.49	14	3	50	374d1.91NM	1.91	18	3	50
374d1.50NM	1.50	14	3	50	374d1.92NM	1.92	18	3	50
374d1.51NM	1.51	14	3	50	374d1.93NM	1.93	18	3	50
374d1.52NM	1.52	14	3	50	374d1.94NM	1.94	18	3	50
374d1.53NM	1.53	14	3	50	374d1.95NM	1.95	18	3	50
374d1.54NM	1.54	14	3	50	374d1.96NM	1.96	18	3	50
374d1.55NM	1.55	14	3	50	374d1.97NM	1.97	18	3	50
374d1.56NM	1.56	14	3	50	374d1.98NM	1.98	18	3	50
374d1.57NM	1.57	14	3	50	374d1.99NM	1.99	18	3	50
374d1.58NM	1.58	14	3	50	374d2.00NM	2.00	18	3	50
374d1.59NM	1.59	14	3	50	374d2.05NM	2.05	18	3	50
374d1.60NM	1.60	14	3	50	374d2.10NM	2.10	20	4	60
374d1.61NM	1.61	14	3	50	374d2.20NM	2.20	20	4	60
374d1.62NM	1.62	14	3	50	374d2.30NM	2.30	20	4	60
374d1.63NM	1.63	14	3	50	374d2.40NM	2.40	20	4	60
374d1.64NM	1.64	14	3	50	374d2.50NM	2.50	20	4	60
374d1.65NM	1.65	14	3	50	374d2.60NM	2.60	20	4	60
374d1.66NM	1.66	14	3	50	374d2.70NM	2.70	20	4	60
374d1.67NM	1.67	14	3	50	374d2.80NM	2.80	20	4	60
374d1.68NM	1.68	14	3	50	374d2.90NM	2.90	20	4	60
374d1.69NM	1.69	14	3	50	374d3.00NM	3.00	20	4	60
374d1.70NM	1.70	18	3	50	374d3.50NM	3.50	20	4	60
374d1.71NM	1.71	18	3	50	374d4.00NM	4.00	20	4	60
374d1.72NM	1.72	18	3	50					
374d1.73NM	1.73	18	3	50					



Nemo coated



135°

Z2



CARB





Since 1948

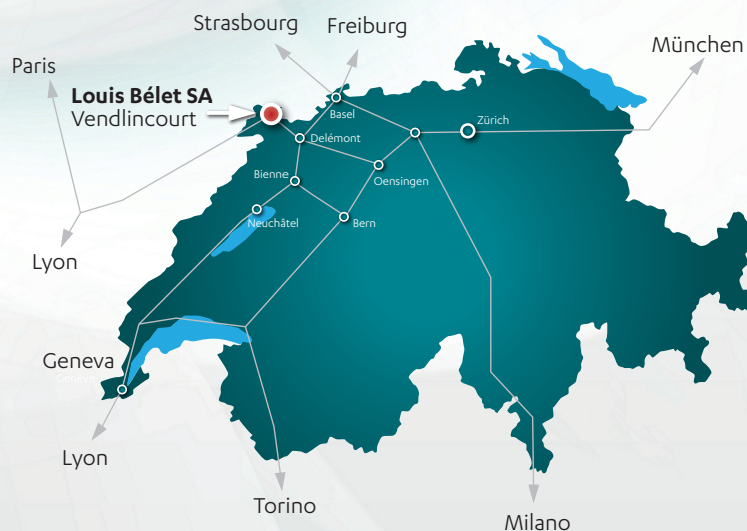
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