

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

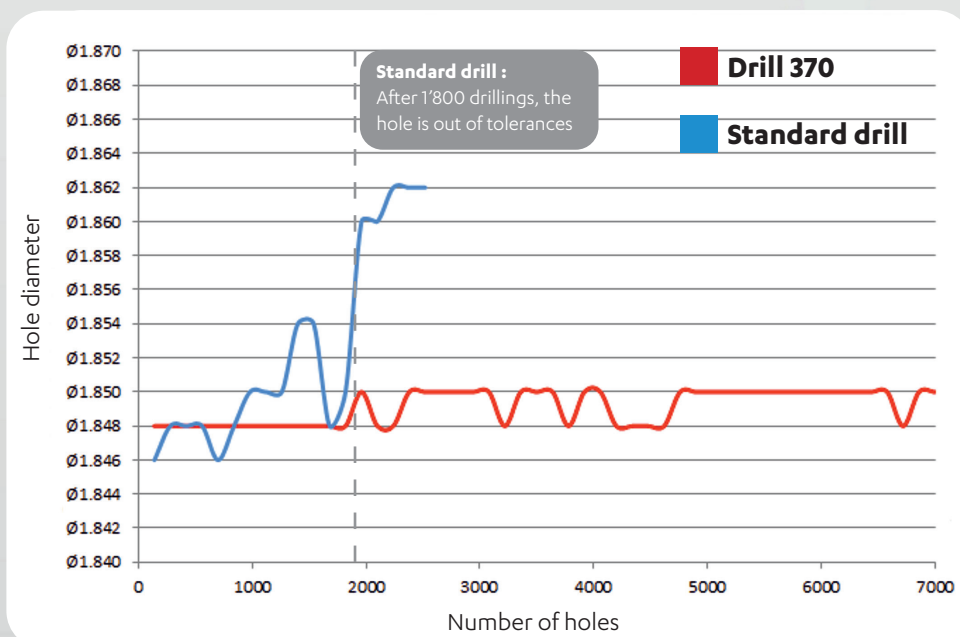
End of life criteria

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

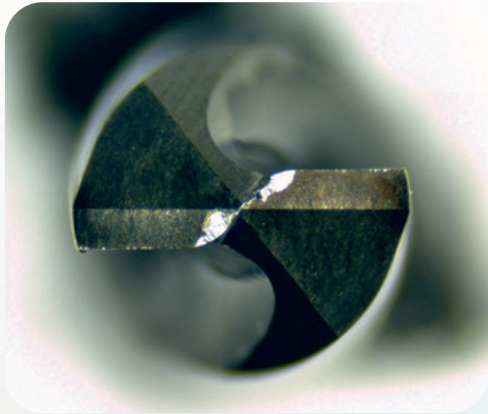
Cutting oil

Results :

Drilling with ref. 370	- Less burrs	- Short chips
	- Holes more accurate	- Cleaner holes

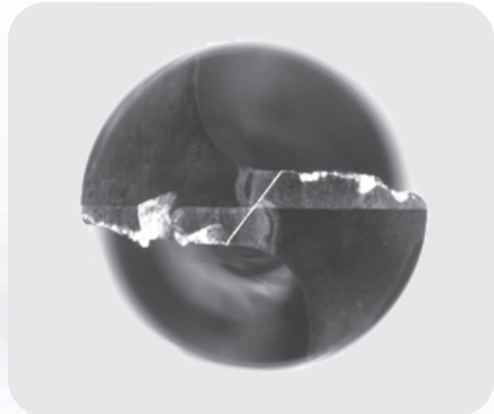


Drill 370



> 7'000 holes

Standard drill



1'800 holes

Examination of the chips

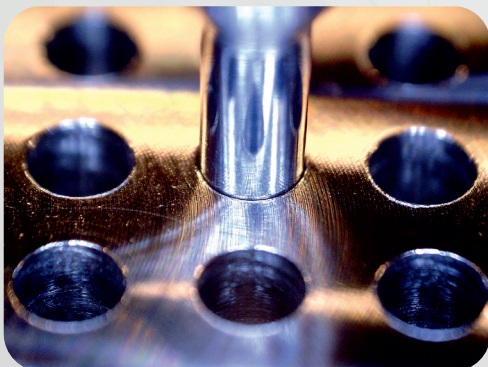


- Fragmentation of the chips
- No chip coiled around the tool shank

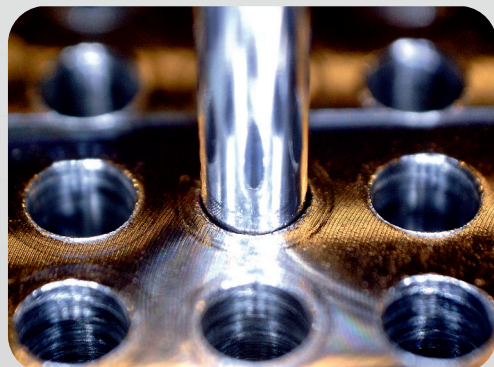


- Long chips
- Building of a cluster of chips around the tool shank

Holes geometries comparison



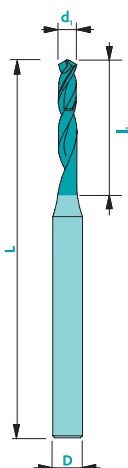
- Less conicity
- Cleaner holes
- Small burrs



- 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 D : h5
 l_1 : 0.1/-0

Nemo coated



Z2



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



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Continuation

Art. n°	d ₁	l ₁	D	L	Art. n°	d ₁	l ₁	D	L
370d1.08NM	1.08	8	3	38	370d1.65NM	1.65	10	3	38
370d1.09NM	1.09	8	3	38	370d1.70NM	1.70	12	3	38
370d1.10NM	1.10	8	3	38	370d1.75NM	1.75	12	3	38
370d1.11NM	1.11	8	3	38	370d1.80NM	1.80	12	3	38
370d1.12NM	1.12	8	3	38	370d1.85NM	1.85	12	3	38
370d1.13NM	1.13	8	3	38	370d1.90NM	1.90	12	3	38
370d1.14NM	1.14	8	3	38	370d1.95NM	1.95	12	3	38
370d1.15NM	1.15	8	3	38	370d2.00NM	2.00	12	3	38
370d1.16NM	1.16	8	3	38	370d2.05NM	2.05	12	3	38
370d1.17NM	1.17	8	3	38	370d2.10NM	2.10	12	3	38
370d1.18NM	1.18	8	3	38	370d2.15NM	2.15	12	3	38
370d1.19NM	1.19	8	3	38	370d2.20NM	2.20	12	3	38
370d1.20NM	1.20	8	3	38	370d2.25NM	2.25	12	3	38
370d1.21NM	1.21	8	3	38	370d2.30NM	2.30	12	3	38
370d1.22NM	1.22	8	3	38	370d2.35NM	2.35	12	3	38
370d1.23NM	1.23	8	3	38	370d2.40NM	2.40	12	3	38
370d1.24NM	1.24	8	3	38	370d2.45NM	2.45	12	3	38
370d1.25NM	1.25	8	3	38	370d2.50NM	2.50	12	3	38
370d1.26NM	1.26	8	3	38	370d2.60NM	2.60	12	3	38
370d1.27NM	1.27	8	3	38	370d2.70NM	2.70	12	3	38
370d1.28NM	1.28	8	3	38	370d2.80NM	2.80	12	3	38
370d1.29NM	1.29	8	3	38	370d2.90NM	2.90	12	3	38
370d1.30NM	1.30	8	3	38	370d3.00NM	3.00	12	3	38
370d1.31NM	1.31	8	3	38					
370d1.32NM	1.32	8	3	38					
370d1.33NM	1.33	8	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					
370d1.50NM	1.50	10	3	38					
370d1.55NM	1.55	10	3	38					
370d1.60NM	1.60	10	3	38					



Nemo coated

135° Z2



Variable

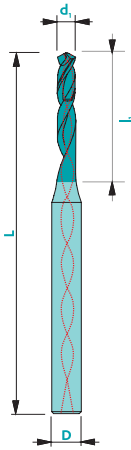
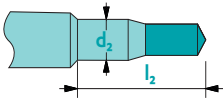
CARB

374H

EXPERT drill for stainless steel - H X



Upon request



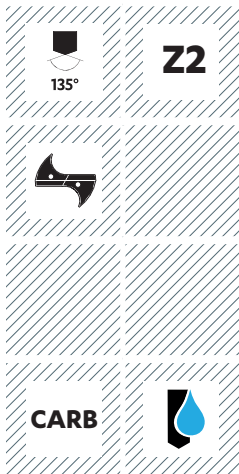
Material	Vc uncoated [m/min]	Vc coated [m/min]	Uncoated	Coated	Rec. Coating*
Steel < 700 N/mm ²	-	-	-	-	-
Steel > 700 N/mm ²	-	-	-	-	-
Stainless steel	-	45	-	■	Nemo (NM)
Hardened steel	-	-	-	-	-
Cast iron	-	-	-	-	-
Copper	-	-	-	-	-
Brass - Bronze	-	-	-	-	-
Aluminium	-	-	-	-	-
Gold - Silver	-	-	-	-	-
Platinum - Palladium	-	-	-	-	-
Superalloys	-	-	-	-	-
Cobalt - chrome	-	-	-	-	-
Titanium	-	-	-	-	-
Composite	-	-	-	-	-

not adapted - adapted □ highly adapted ■

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

Tolerances d_1 : -0.002/-0.004
D: h5

Available coated only



Art. n°	d_1	l_1	D	L
374d0.70	0.70	8	3	51
374d0.71	0.71	8	3	51
374d0.72	0.72	8	3	51
374d0.73	0.73	8	3	51
374d0.74	0.74	8	3	51
374d0.75	0.75	8	3	51
374d0.76	0.76	8	3	51
374d0.77	0.77	8	3	51
374d0.78	0.78	8	3	51
374d0.79	0.79	8	3	51
374d0.80	0.80	8	3	51
374d0.81	0.81	8	3	51
374d0.82	0.82	8	3	51
374d0.83	0.83	8	3	51
374d0.84	0.84	8	3	51
374d0.85	0.85	8	3	51
374d0.86	0.86	8	3	51
374d0.87	0.87	8	3	51
374d0.88	0.88	8	3	51
374d0.89	0.89	8	3	51
374d0.90	0.90	10	3	51
374d0.91	0.91	10	3	51
374d0.92	0.92	10	3	51
374d0.93	0.93	10	3	51
374d0.94	0.94	10	3	51
374d0.95	0.95	10	3	51
374d0.96	0.96	10	3	51
374d0.97	0.97	10	3	51

Art. n°	d_1	l_1	D	L
374d0.98	0.98	10	3	51
374d0.99	0.99	10	3	51
374d1.00	1.00	12	3	51
374d1.01	1.01	12	3	51
374d1.02	1.02	12	3	51
374d1.03	1.03	12	3	51
374d1.04	1.04	12	3	51
374d1.05	1.05	12	3	51
374d1.06	1.06	12	3	51
374d1.07	1.07	12	3	51
374d1.08	1.08	12	3	51
374d1.09	1.09	12	3	51
374d1.10	1.10	12	3	51
374d1.11	1.11	12	3	51
374d1.12	1.12	12	3	51
374d1.13	1.13	12	3	51
374d1.14	1.14	12	3	51
374d1.15	1.15	12	3	51
374d1.16	1.16	12	3	51
374d1.17	1.17	12	3	51
374d1.18	1.18	12	3	51
374d1.19	1.19	12	3	51
374d1.20	1.20	14	3	51
374d1.21	1.21	14	3	51
374d1.22	1.22	14	3	51
374d1.23	1.23	14	3	51
374d1.24	1.24	14	3	51
374d1.25	1.25	14	3	51

* Prices for coatings: contact us!
To order a coated tool, add the 2-letter coating code to the article number



EXPERT drill for stainless steel - with internal coolant



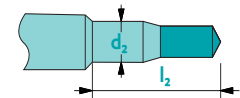
374H

Continuation

Art. n°	d ₁	l ₁	D	L	Art. n°	d ₁	l ₁	D	L
374d1.26	1.26	14	3	51	374d1.70	1.70	18	3	51
374d1.27	1.27	14	3	51	374d1.71	1.71	18	3	51
374d1.28	1.28	14	3	51	374d1.72	1.72	18	3	51
374d1.29	1.29	14	3	51	374d1.73	1.73	18	3	51
374d1.30	1.30	14	3	51	374d1.74	1.74	18	3	51
374d1.31	1.31	14	3	51	374d1.75	1.75	18	3	51
374d1.32	1.32	14	3	51	374d1.76	1.76	18	3	51
374d1.33	1.33	14	3	51	374d1.77	1.77	18	3	51
374d1.34	1.34	14	3	51	374d1.78	1.78	18	3	51
374d1.35	1.35	14	3	51	374d1.79	1.79	18	3	51
374d1.36	1.36	14	3	51	374d1.80	1.80	18	3	51
374d1.37	1.37	14	3	51	374d1.81	1.81	18	3	51
374d1.38	1.38	14	3	51	374d1.82	1.82	18	3	51
374d1.39	1.39	14	3	51	374d1.83	1.83	18	3	51
374d1.40	1.40	14	3	51	374d1.84	1.84	18	3	51
374d1.41	1.41	14	3	51	374d1.85	1.85	18	3	51
374d1.42	1.42	14	3	51	374d1.86	1.86	18	3	51
374d1.43	1.43	14	3	51	374d1.87	1.87	18	3	51
374d1.44	1.44	14	3	51	374d1.88	1.88	18	3	51
374d1.45	1.45	14	3	51	374d1.89	1.89	18	3	51
374d1.46	1.46	14	3	51	374d1.90	1.90	18	3	51
374d1.47	1.47	14	3	51	374d1.91	1.91	18	3	51
374d1.48	1.48	14	3	51	374d1.92	1.92	18	3	51
374d1.49	1.49	14	3	51	374d1.93	1.93	18	3	51
374d1.50	1.50	14	3	51	374d1.94	1.94	18	3	51
374d1.51	1.51	14	3	51	374d1.95	1.95	18	3	51
374d1.52	1.52	14	3	51	374d1.96	1.96	18	3	51
374d1.53	1.53	14	3	51	374d1.97	1.97	18	3	51
374d1.54	1.54	14	3	51	374d1.98	1.98	18	3	51
374d1.55	1.55	14	3	51	374d1.99	1.99	18	3	51
374d1.56	1.56	14	3	51	374d2.00	2.00	18	3	51
374d1.57	1.57	14	3	51	374d2.05	2.05	18	3	51
374d1.58	1.58	14	3	51	374d2.10	2.10	20	4	60
374d1.59	1.59	14	3	51	374d2.20	2.20	20	4	60
374d1.60	1.60	14	3	51	374d2.30	2.30	20	4	60
374d1.61	1.61	14	3	51	374d2.40	2.40	20	4	60
374d1.62	1.62	14	3	51	374d2.50	2.50	20	4	60
374d1.63	1.63	14	3	51	374d2.60	2.60	20	4	60
374d1.64	1.64	14	3	51	374d2.70	2.70	20	4	60
374d1.65	1.65	14	3	51	374d2.80	2.80	20	4	60
374d1.66	1.66	14	3	51	374d2.90	2.90	20	4	60
374d1.67	1.67	14	3	51	374d3.00	3.00	20	4	60
374d1.68	1.68	14	3	51	374d3.50	3.50	20	4	60
374d1.69	1.69	14	3	51	374d4.00	4.00	20	4	60



Upon request



Available coated only

	Z2
CARB	

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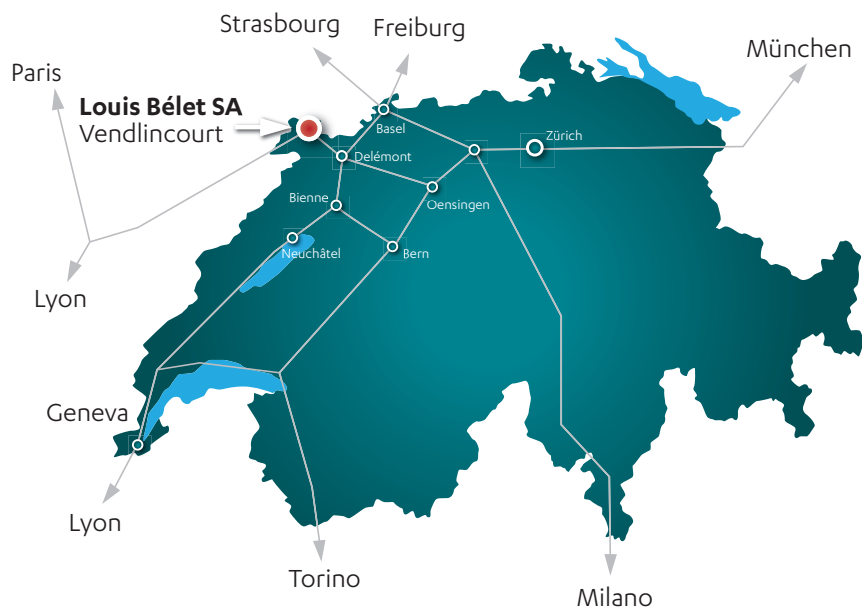


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