WERK NICK RATING™ (based on the GALILEO - JOHANNESBURG cross)

(+196%)



Generated on 03/01/21 NORTHERN DANCER (B/C)

SADLER'S WELLS (C/S)

FAIRY BRIDGE

GALILEO (Q)

MISWAKI (Q)

URBAN SEA

ALLEGRETTA

FRANKEL

(2008)

DANZIG (I/C)

DANEHILL (Q) RÀŹYANA

KIND

RAINBOW QUEST (C/S)

RAINBOW LAKE

ROCKFFST

Prospective foal

HENNESSY (Q)

JOHANNESBURG

SCAT DADDY (B/C)

LOVE STYLE

DADDYS POPPIT

(2015)

KINGMAMBO (C/S)

LEMON DROP KID

CHARMING LASSIE

VALIANT GIRL

MARK OF ESTEEM

VICTORIA CROSS

GLOWING WITH PRIDE

NEARCTIC NATALMA

BOLD REASON

SPECIAL

MR. PROSPECTOR

HOPESPRINGSETERNAL

LOMBARD

ANATEVKA

NORTHERN DANCER

PAS DE NOM

HIS MAJESTY

SPRING ADIEU

BLUSHING GROOM

I WILL FOLLOW

STAGE DOOR JOHNNY

ROCK GARDEN II

STORM CAT

OGYGIAN

YARN

ISLAND KITTY

RAISE A NATIVE

GOLD DIGGER

MYTH

MR. PROSPECTOR (B/C)

LIKEABLE STYLE

PERSONABLE LADY

MR. PROSPECTOR

NIJINSKY II

MIESQUE

SEATTLE SLEW LASSIE DEAR

DARSHAAN

HOMAGE

ILE DE BOURBON

BE EASY

Sibling Identifier: odd numbers = same dam only; even numbers = same sire and dam

Roman Dosage Profile: (6-1-11-4-0)

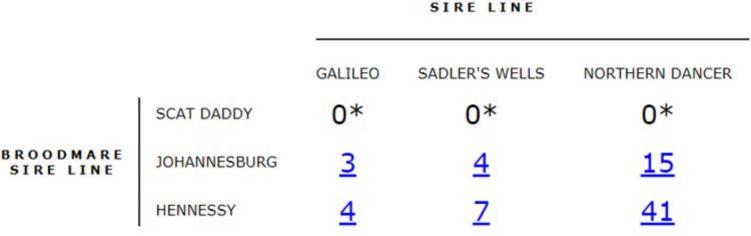
C.D.: 0.41 D.I.: 1.32

Werk Quality Rating: Q 7

+ Quality Points: Dosage Points: 22 = Total Points: 38 16

5-Generation Inbreeding: NORTHERN DANCER - 4m, 5m x

MR. PROSPECTOR - 5m x 4f, 5m



GeoNicks[™] Australasia

FRANKEL--DADDYS POPPIT



(616%)

Based on the SADLER'S WELLS--JOHANNESBURG cross This cross has produced 2 stakes winners in Australasia, including:

Stakes Winner	Yob	Sex Best Dirt AW	/STurf Pedigre	е
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COOL CHAP	2012	С	Υ	HIGH CHAPARRAL ex CHERISHING (JOHANNESBURG)
WINNING PARTNER	2015	С	Υ	DAWN APPROACH ex LADY FRERE (JOHANNESBURG)



GeoNicks[™] Europe

FRANKEL--DADDYS POPPIT



(478%)

Based on the GALILEO--JOHANNESBURG cross This cross has produced 2 stakes winners in Europe, including:



SEVENTH HEAVEN 2013 F G1 Y GALILEO ex LA TRAVIATA (JOHANNESBURG)

BALLET SHOES 2015 F Y GALILEO ex EMERALD RING (JOHANNESBURG)



GeoNicks™ North America

FRANKEL--DADDYS POPPIT



Based on the SADLER'S WELLS--STORM CAT cross

This cross has produced 23 stakes winners in North America, including:



Stakes Winner	Yob	Sex	Best	Dirt	AWS	Turf	Pedigree
STEPHANIE'S KITTEN	2009	F	G1		Υ	Υ	KITTEN'S JOY ex UNFOLD THE ROSE (CATIENUS)
BOBBY'S KITTEN	2011	С	G1			Υ	KITTEN'S JOY ex CELESTIAL WOODS (FORESTRY)
HENLEY'S JOY	2016	С	G1			Υ	KITTEN'S JOY ex BLUE GRASS MUSIC (BLUEGRASS CAT)
NO PAROLE	2017	С	G1	Υ			VIOLENCE ex PLUS ONE (BLUEGRASS CAT)
GLOBAL VIEW	2011	С	G2			Υ	GALILEO ex EGYPTIAN QUEEN (STORM CAT)
CAMELOT KITTEN	2013	С	G2		Υ	Υ	KITTEN'S JOY ex CELESTIAL WOODS (FORESTRY)
CATAPULT	2013	С	G2			Υ	KITTEN'S JOY ex GATA BELLA (STORM CAT)
CALIFORNIAGOLDRUSH	2015	F	G2			Υ	CAPE BLANCO ex QARAABA (SHAMARDAL)
ELIZABETH WAY	2016	F	G2			Υ	FRANKEL ex MAIDS CAUSEWAY (GIANT'S CAUSEWAY)
ARTIE'S PRINCESS	2017	F	G2		Υ		WE MISS ARTIE ex STORMKEEPER (STORMY ATLANTIC)
PALADIN BAY	2011	F	G3		Υ		SLIGO BAY ex STORMIN WIFE (STORMIN FEVER)
DUVEEN	2004	С	G3			Υ	HORSE CHESTNUT ex CASANOVA STORM (STORM CAT)
DERBY KITTEN	2008	С	G3		Υ	Υ	KITTEN'S JOY ex BLUSH (MENIFEE)
FEEDBACK	2016	F	G3	Υ			VIOLENCE ex HONEST ANSWER (TALE OF THE CAT)
WILLIAM'S KITTEN	2007	С		Υ			KITTEN'S JOY ex BLUSH (MENIFEE)
MAJOR MAGIC	2009	С				Υ	KITTEN'S JOY ex CELESTIAL WOODS (FORESTRY)
EMPIRE BUILDER	2009	С		Υ		Υ	KITTEN'S JOY ex ANURA (GIANT'S CAUSEWAY)
POLITICALLYCORRECT	2009	G		Υ			KITTEN'S JOY ex EXCEEDEXPECTATIONS (TALE OF THE CAT)
ONDINE	2010	F		Υ			MEDAGLIA D'ORO ex ARROW IN FLIGHT (FOREST WILDCAT)
LUCK OF THE KITTEN	2012	С				Υ	KITTEN'S JOY ex ANURA (GIANT'S CAUSEWAY)
KAREENA	2013	F		Υ			MEDAGLIA D'ORO ex INDIA (HENNESSY)
KITTEN'S CAT	2014	С				Υ	KITTEN'S JOY ex BRUSHWORK (DISCREET CAT)
SNIPER KITTEN	2015	С				Υ	KITTEN'S JOY ex CAT ON A TIN ROOF (CATIENUS)



Stakes winners bred from the GALILEO--JOHANNESBURG cross

Stakes Winner	Yob	Sex	Best	Dirt AWS	Turf	Pedigree
BALLET SHOES	2015	F			Υ	GALILEO ex EMERALD RING (JOHANNESBURG)
SEVENTH HEAVEN	2013	F	G1		Υ	GALILEO ex LA TRAVIATA (JOHANNESBURG)
WINNING PARTNER	2015	С			Υ	DAWN APPROACH ex LADY FRERE (JOHANNESBURG)



Stakes winners bred from the GALILEO--HENNESSY cross

Stakes Winner	Yob	Sex	Best	Dirt	AWS	Turf	Pedigree
BALLET SHOES	2015	F				Υ	GALILEO ex EMERALD RING (JOHANNESBURG)
MOZU ASCOT	2014	С	G1	Υ		Υ	FRANKEL ex INDIA (HENNESSY)
SEVENTH HEAVEN	2013	F	G1			Υ	GALILEO ex LA TRAVIATA (JOHANNESBURG)
WINNING PARTNER	2015	C				V	DAWN APPROACH ex LADY FRERE (JOHANNESBURG)



Stakes winners bred from the SADLER'S WELLS--JOHANNESBURG cross

Stakes Winner	Yob	Sex	Best	Dirt AWS	Turf	Pedigree
BALLET SHOES	2015	F			Υ	GALILEO ex EMERALD RING (JOHANNESBURG)
COOL CHAP	2012	С			Υ	HIGH CHAPARRAL ex CHERISHING (JOHANNESBURG)
SEVENTH HEAVEN	2013	F	G1		Υ	GALILEO ex LA TRAVIATA (JOHANNESBURG)
WINNING PARTNER	2015	C			Υ	DAWN APPROACH ex LADY FRERE (JOHANNESBURG)



Stakes winners bred from the SADLER'S WELLS--HENNESSY cross

Stakes Winner	Yob	Sex	Best	Dirt	AWS	Turf	Pedigree
BALLET SHOES	2015	F				Υ	GALILEO ex EMERALD RING (JOHANNESBURG)
COOL CHAP	2012	С				Υ	HIGH CHAPARRAL ex CHERISHING (JOHANNESBURG)
FLIRTINI	2015	F	G3			Υ	ARTIE SCHILLER ex AJAWEED (HENNESSY)
KAREENA	2013	F		Υ			MEDAGLIA D'ORO ex INDIA (HENNESSY)
MOZU ASCOT	2014	С	G1	Υ		Υ	FRANKEL ex INDIA (HENNESSY)
SEVENTH HEAVEN	2013	F	G1			Υ	GALILEO ex LA TRAVIATA (JOHANNESBURG)
WINNING PARTNER	2015	С				Υ	DAWN APPROACH ex LADY FRERE (JOHANNESBURG)



Stakes winners bred from the NORTHERN DANCER--JOHANNESBURG cross

Stakes Winner	Yob	Sex	Best	Dirt	AWS	Turf	Pedigree
AGAINST RULES	2012	F				Υ	AUSSIE RULES ex AROUND ME (JOHANNESBURG)
BACCARAT BABY	2015	F	G3			Υ	CASINO PRINCE (AUS) ex MEERLUST (JOHANNESBURG)
BALLET SHOES	2015	F				Υ	GALILEO ex EMERALD RING (JOHANNESBURG)
COOL CHAP	2012	С				Υ	HIGH CHAPARRAL ex CHERISHING (JOHANNESBURG)
GUAPO COMO YO	2017	С	G3	Υ			CATCHER IN THE RYE ex POR TI SI (JOHANNESBURG)
JET SETTING	2013	F	G1			Υ	FAST COMPANY ex MEAN LAE (JOHANNESBURG)
LONG TIME AGO	2013	F	G3			Υ	REDOUTE'S CHOICE ex ONCE WERE WILD (JOHANNESBURG)
NICE TO SEE YOU	2013	С				Υ	SIYOUNI ex AROUND ME (JOHANNESBURG)
PARURE	2017	F	G2			Υ	FASTNET ROCK ex FONTEIN RUBY (TURFFONTEIN)
REPARTEE	2017	С				Υ	INVINCIBLE SPIRIT ex PLEASANTRY (JOHANNESBURG)
SEVENTH HEAVEN	2013	F	G1			Υ	GALILEO ex LA TRAVIATA (JOHANNESBURG)
VERO DA VINCI	2011	С				Υ	PEINTRE CELEBRE ex QUERIDA JOANA (JOHANNESBURG)
WIND CHIMES	2015	F	G3			Υ	MASTERCRAFTSMAN ex MILITANTE (JOHANNESBURG)
WINNING PARTNER	2015	С				Υ	DAWN APPROACH ex LADY FRERE (JOHANNESBURG)
ZARANTZ	2010	С				Υ	CHOISIR ex BONISSIMO (JOHANNESBURG)



Stakes winners bred from the NORTHERN DANCER--HENNESSY cross

Stakes Winner	Yob	Sex	Best	Dirt	AWS	Turf	Pedigree
AGAINST RULES	2012	F				Υ	AUSSIE RULES ex AROUND ME (JOHANNESBURG)
AJAYA	2013	С	G2			Υ	INVINCIBLE SPIRIT ex NESSINA (HENNESSY)
ANEVAY	2008	F				Υ	EXCEED AND EXCEL ex CATEGORICAL (HENNESSY)
ARMISTICE DAY	2016	С				Υ	DECLARATION OF WAR ex HARMONY LODGE (HENNESSY)
BACCARAT BABY	2015	F	G3			Υ	CASINO PRINCE (AUS) ex MEERLUST (JOHANNESBURG)
BALLET SHOES	2015	F				Υ	GALILEO ex EMERALD RING (JOHANNESBURG)
BE POSITIVE	2005	F	G3			Υ	ANABAA ex RED BLOODED (HENNESSY)
COOL CHAP	2012	С				Υ	HIGH CHAPARRAL ex CHERISHING (JOHANNESBURG)
EXOTERIC	2013	С				Υ	CHAMPS ELYSEES ex SHORT DANCE (HENNESSY)
EXTRA ELUSIVE	2015	С	G3			Υ	MASTERCRAFTSMAN ex NESSINA (HENNESSY)
FAST 'N' ROCKING	2010	С	G3			Υ	FASTNET ROCK ex FOR THE GOOD TIMES (HENNESSY)
FLIRTINI	2015	F	G3			Υ	ARTIE SCHILLER ex AJAWEED (HENNESSY)
GIANT'S STEPS	2009	С	G1			Υ	GIANT'S CAUSEWAY ex HAMSAAT HI HAAT (HENNESSY)
GOLD TYRANNY	2014	С		Υ			ZOFFANY ex THARA (HENNESSY)
GUAPO COMO YO	2017	С	G3	Υ			CATCHER IN THE RYE ex POR TI SI (JOHANNESBURG)
GUERRE	2011	С		Υ		Υ	WAR FRONT ex GOLDEN TOAST (HENNESSY)
IRISH LIGHTS	2006	F	G1			Υ	FASTNET ROCK ex ASPEN FALLS (HENNESSY)
JET SETTING	2013	F	G1			Υ	FAST COMPANY ex MEAN LAE (JOHANNESBURG)
KAREENA	2013	F		Υ			MEDAGLIA D'ORO ex INDIA (HENNESSY)
KRUPT	2005	С	G2			Υ	FLYING SPUR ex CATEGORICAL (HENNESSY)
LONG TIME AGO	2013	F	G3			Υ	REDOUTE'S CHOICE ex ONCE WERE WILD (JOHANNESBURG)
MOZU ASCOT	2014	С	G1	Υ		Υ	FRANKEL ex INDIA (HENNESSY)
NICE TO SEE YOU	2013	С				Υ	SIYOUNI ex AROUND ME (JOHANNESBURG)
PARURE	2017	F	G2			Υ	FASTNET ROCK ex FONTEIN RUBY (TURFFONTEIN)
PRAIRIE FIRE	2015	С				Υ	SNITZEL ex CONSISTENCY (ALL BAR ONE)
PRIVATE DANCER	2014	F				Υ	ORATORIO (AUS) ex ATAVISM (HENNESSY)
REPARTEE	2017	С				Υ	INVINCIBLE SPIRIT ex PLEASANTRY (JOHANNESBURG)
RICHIE'S VIBE	2009	G	G2			Υ	DANERICH ex EARLY WAKENING (HENNESSY)
SEASIDE	2009	F	G3			Υ	REDOUTE'S CHOICE ex LIVING SPIRIT (HENNESSY)
SEVENTH HEAVEN	2013	F	G1			Υ	GALILEO ex LA TRAVIATA (JOHANNESBURG)
SOBRE ACTION	2014	С	G2	Υ			INTERACTION ex SOBRIQUET (HENNESSY)
SUPERFLY	2004	F				Υ	ROCK OF GIBRALTAR ex ALLEZ FRANCE (HENNESSY)
TENANT'S TIARA	2004	F				Υ	BEAUTIFUL CROWN ex MAINTENANT (HENNESSY)
TRIPLE ASSET	2008	F	G3			Υ	NADEEM ex CARALOWE (HENNESSY)
TRUSON	2011	С				Υ	AL MAHER ex AJAWEED (HENNESSY)
VARIOMETER	2008	F				Υ	VAR ex LADY ELECTRIC (HENNESSY)
VERO DA VINCI	2011	С				Υ	PEINTRE CELEBRE ex QUERIDA JOANA (JOHANNESBURG)
WIND CHIMES	2015	F	G3			Υ	MASTERCRAFTSMAN ex MILITANTE (JOHANNESBURG)
WINNING PARTNER	2015	С				Υ	DAWN APPROACH ex LADY FRERE (JOHANNESBURG)
ZARANTZ	2010	С				Υ	CHOISIR ex BONISSIMO (JOHANNESBURG)
ZULU LAND	2011	С	G2			Υ	FASTNET ROCK ex DREAM PLAY (HENNESSY)

PEDIGREE RATING SCORES - "NICKS"

It's a simple formula – It's all about risk reduction.

Nicks have become an integral part of the decision-making process in the mating and purchasing of thoroughbreds. Most breeders recognise that an affinity or compatibility can exist between two thoroughbred sire lines, such that, when crossed, those lines yielded a greater proportion of superior runners than when either one of them are crossed with any other sire lines. Great breeders, from Federico Tesio to present-day breeders around the world have relied on observed nicks to help guide their breeding plans and buying decisions.

Over 70% of ALL Stakes Winners are "A" Rated Nicks

In order to identify nicks in a systematic way, the software database we use developed an evaluation method based on sire-line analysis. Ongoing studies by researchers show that approximately 25% of the Thoroughbred population is the product of highly successful nicks ("A" rated nicks) while over 70% of stakes winners come from these "A" rated nicks!

Statistics:

There are approximately 20,000 live foals born each year – 25% (5,000) are A Rated whilst 75% (15,000) are rated below. There are 541 Stakes Races in Australia this racing season. 70% (379) will be won from the 5,000 A rated foals born (7.6%) 30% (162) will be won from the 15,000 foals in the lower rated group (1.08%).

For a practical businessperson seeking a return on money invested, it makes no sense to ignore statistically unfavorable odds. Buying a superior racehorse is already a difficult enough proposition. The Rating systems we use allow us to see into the future by looking into the past and thereby to avoid those mating patterns that have failed. The Nick Rating enables us to avoid crosses that have had little or no success in the past. At the same time, it enables us to identify and thus duplicate successful sire-line crosses, dramatically increasing the chances of success.

Over the years evaluating Nicks have proven to be an invaluable tool in the stallion selection process when identifying yearlings for purchase. Dean Watt, Managing Director of Dynamic Syndications has enjoyed great success as a result of utilising such information. For example:

SAVABEEL, POLAR SUCCESS, HE'S NO PIE EATER, ATOMIC FORCE, ECONSUL, DE BEERS, BRADBURY'S LUCK, TENANT'S TIARA and REWARD FOR EFFORT were all superior racehorses who had superior pedigree ratings.

ECONSUL	A ++	13,862%
SAVABEEL	A ++	9,325%
DEBEERS	A ++	4,270%
POLAR SUCCESS	A ++	2,240%
REWARD FOR EFFORT	\mathbf{A} +	1,175%
ATOMIC FORCE	\mathbf{A} +	988%
BRADBURY'S LUCK	\mathbf{A}	485%
TENANT'S TIARA	\mathbf{A}	238%
HE'S NO PIE EATER	A	161%

Further afield, in 2008 the Top 5 Racehorses in the world had the following ratings:

1 CURLIN	\mathbf{A} +	1,375%
2 NEW APPROACH	\mathbf{A} +	1,472%
3 RAVEN'S PASS	A ++	5,961%
4 DUKE OF MARMALADE	\mathbf{A}	409%
5 HENRYTHENAVIGATOR	A ++	1,531%

Then to further support the theories, in 2008 there was 67 Group 1 races run in Australia. These races were won by 48 individual horses. When these 48 individuals' pedigrees were analysed it showed:

35 / 48 Rated A or above = 73% of Individual Group 1 Winners Rates A or above

Affinity between sire lines was long ago observed by the world's best thoroughbred breeders. Today through modern technologies we are able to quantify what was once only a subjective judgment based on the observations of a relatively small equine population.

Ratings are essentially the objective measurement of success, or lack therefore, of sireline crosses. Success is quantified by being the winners of stakes races with a prizemoney of at least \$50,000. Through software databases, containing the pedigrees of all such winners since 1977 (over 30,000 winners), we are able to more easily identify what sireline crosses have succeeded in producing stakes winners and compare those numbers with the stakes winning population on the whole.

Often a sire line may appear to be successful with a particular broodmare sire line. However, if the level of success is no better than that sire line's success with the entire population, then there is not a true nick.

In order to understand the ratings for easy use, a letter-grade scale was developed. As in the scholastic setting, the scales ranges from F (Fail) through to A with A+ also A++ and now since 2011 the software system now identifies A+++ as possible to be achieved in some select instances. The Variants (percentages) shown in the table below are the deviation from the norm that has been observed by that sire line cross in question. On this

scale -15% to +15% (C) is considered average, meaning that the sire-line cross has yielded results that are statistically no better and no worse than what would be expected with the entire population.

An "A" rated nick indicates that a far greater percentage of stakes winners have resulted from that cross than expected. An "F" rated nick indicates that the number of stakes winners resulting from a cross is at least 50% below expectations. This does not mean that there cannot be success or will not be success from such a mating in the future. It does mean that in all the experience of the last 20 + years of winners of stakes races, that type of mating has had a significant lack of success as measured by stakes winner production.

It must be stressed that a below "Average" rating does not guarantee or even predict failure. It means only that, to date, the particular sire-line cross has fallen at least 16% short of what would be expected. Nicks can and do change over time.

Consequently, an above Average Rating must be kept in proper perspective as there are other factors that must be considered when selecting a horse for purchase. Specifically, conformation evaluation is critical. A thoroughbred may have a brilliant pedigree on paper that rates as either Excellent, Superior, Superb or Outstanding on our Ratings Score however if the skeletal structure and/or the overall constitution of the individual is lacking then the horse is rejected as a candidate for purchase.

The Rating Scale is shown below:

Nick	Horse	Variant %
A+++	Excellent	+20,000 and above
A++	Superior	+1,501 to + 19,999
A+	Superb	+500 to +1,500
A	Outstanding	+150 to +499
B+	Very Good	+100 to +149
В	Good	+50 to +99
C+	Acceptable	+16 to +49
C	Average	-15 to +15
D+	Weak	-16 to -34
D	Poor	-35 to -49
F	Unsuccessful	-50
0 SW	Zero Stakes Winners	0 SW

Dynamic Syndications uses these rating tools along with additional pedigree analysis systems from other software databases which skewer the data to local environmental factors and we have introduced a ranking on the class of Stakes Races which are won to establish what we consider is an inherent opportunity of greater racetrack success. Often a horse can have a very high Nick rating and yet score lowly on the variant and visa versa. We use this information to assist us in pedigree selections after the physical inspections have also been considered. Also we cannot blindly accept a rating score. For example Australia has only 2.9% of our races listed as Stakes Races whilst New Zealand has 9.7% and Ireland has 13.1%. Obviously the data will be weighted in certain directions if we did not counter this information with a ranking on the Stakes Races based upon country and class of race, racing region within the country and climatic conditions in the region. After adjustments the rating scale is presented below.

Quality Rating Summary

It is undeniable that racing class is in great part a function of the *quality* of ancestors contributing to new individual. It follows that certain quality stallions tend to contribute more favorably than other sires. When Quality points contributed by such deserving sires are combined with dosage points, the total points more accurately reflect the overall class of a pedigree.

The *Quality sires* in a pedigree contribute quality points (QP) to the new individual in exactly the same way as ancestral sires contribute dosage points (DP). The total number of *Quality points* is added to the *Dosage points* to get *Total Points* (TP).

The Quality Rating, which ranges from zero, as the low, to ten, as the high, is scaled to the number of total points in the pedigree:

Total Points	Quality Rating
0	Q0
1 to 4	Q1
5 to 9	Q2
10 to 14	Q3
15 to 19	Q4
20 to 24	Q5
25 to 29	Q6
30 to 39	Q7
40 to 44	Q8
45 to 54	Q 9
55 +	Q10